REHABILITATION PLAN FOR THE SPURGEON HOUSE

115 SOUTH COUNCIL STREET, MUNCIE, INDIANA

A 6-HOUR CREATIVE PROJECT

SUBMITTED TO THE GRADUATE SCHOOL

IN PARTIAL FULFILLMENT OF THE REQUIREMENTS

FOR THE DEGREE OF

MASTER OF SCIENCE IN HISTORIC PRESERVATION

BY

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This creative project would not have been possible without the guidance and information provided by Dr. Marlon Rollins of the St. Peter's Rock Foundation in Christ Church. The insight provided was crucial to fully understanding the Spurgeon House and the current situation at hand.

Lastly, I am indebted to the members of my thesis and creative project support group for their friendship and encouragement throughout this process.

Chris Allen

Anya Grahn

Kelli Kellerhals

ILLUSTRATIONS

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GLOSSARY OF TERMS[1]

Chamfered – A beveled surface, usually formed or cut at a 45° angle to the adjacent principal face

Cross-gable roof – Two gable roofs (a roof sloping downward in two parts from a central ridge so as to form a gable at each end) with the ridges running perpendicular to each other

Eave – The overhanging lower edge of a roof

Façade – The front of a building or any of its sides facing a public way or space, especially one distinguished by its architectural treatment

Fascia – Any board, flat, horizontal surface, as the outer edge of a cornice or roof

Hip roof – A roof having sloping ends and sides meeting at an inclined projecting angle

Muntin – A rabbeted member for holding the edges of windowpanes within a sash

Purlin – A longitudinal member of a roof frame for supporting common rafters between the ridge and the eaves

Sash – The fixed or moveable framework of a window or door in which panes of glass are set

Shed roof – A roof having a single slope

Spalling – The chipping or scaling of a hardened concrete or masonry surface caused by freeze-thaw cycles or the application of deicing salts

Tongue and groove – A joint made by fitting a raised area or tongue on the edge of one member into a corresponding groove in the edge of another member to produce a flush surface

Transom – A window above a doorway

[1] Francis D. K. Ching, *A Visual Dictionary of Architecture* (New York: John Wiley & Sons, Inc., 1995).

EXECUTIVE SUMMARY

Location

This rehabilitation plan focuses on the Spurgeon House located at 115 South Council Street located in Delaware County, Muncie, Indiana, within the Old West End Historic District.

Purpose and Limits of the Report

The Spurgeon House, a local landmark owned by the St. Peter's Rock Foundation in Christ Church, was placed on the Unsafe Building agenda by the Building Commissioner of the City prior to 2006, due to a dilapidated attached carport on the west elevation and the railings on the front porch which failed to meet code requirements. After the removal of the carport and porch railings in 2006, the home was taken off the Unsafe Building list. In August of 2010 the home was placed back on the Unsafe Building list at the request of the church, because the west elevation was in poor condition. A rehabilitation order was made on the home, forcing the owner's to show significant efforts toward rehabilitation. On March 19, 2012 a small fire occurred outside the bay window on the south elevation. The fire was alerted and quickly extinguished, limiting fire, smoke, and water damage to the bay window. According to the Muncie Historic Preservation Officer, Bill Morgan, the rehabilitation order for the home was

amended to a demolition order and will be on the next tax sale by the County Commissioners held from March 22, 2012 to April 2, 2012 with a minimum bid of $200. Because the church wants to rehabilitate the Spurgeon House to become a residential home, it needs a rehabilitation plan to provide accurate preservation guidance. The rehabilitation plan will provide the church with proof of the home's worth and justification against demolition. The project includes historical research, physical analysis and photo documentation of current conditions and structural issues, architectural drawings reflecting the current condition and proposed design, suggestions for rehabilitation of the building, and cost estimates for the proposed scope of work.

Site Description

The Spurgeon House is located in an urban setting within the Old West End neighborhood, west of downtown. The majority of the surrounding area is residential, though there are a few religious buildings and small businesses. The majority of the commercial buildings are located along West Main and West Jackson streets. The rectilinear lots of the neighborhood form a grid pattern.

Overall Description of the Spurgeon House

Built between 1886 and 1892 by William Spurgeon, the home is a one-story, wood frame building with a cross-gable, asphalt shingle roof. The building is a small Victorian cottage that was common in the late 1800s. The cross-gable roof is typical of Victorian cottages and is a contributing element to the home's significance. The small front porch that leads to the original front door is also typical, and contributes to the

home's architectural significance. Many additional architectural features remain, including original doors, windows, wood trim, flooring, and plaster.

The interior of the home consists of a living room/dining room at the east and south side of the building, one bedroom north of the living room, a kitchen located west of the dining area, and a bathroom to the south. Located off the kitchen is a staircase leading to the basement and crawl space. See page 20 for a floor plan.

Description of Previous Preservation, Rehabilitation, Restoration, and Reconstruction Efforts

Since the St. Peter's Rock Foundation in Christ acquired the home in 2005, the following alterations were made:

- The attached carport on the west side of the home was removed. Attempts were made to patch up the exposed plaster and lath with various pieces of siding, boards, and wood.
- The porch railing was removed, because its height did not comply with city code. A new porch deck was installed and the deteriorating wood posts were replaced.
- Many interior elements were removed. Soiled carpet, drop ceilings, and wood wall paneling were disposed of and the following items were placed in storage; kitchen cabinets, kitchen sink, dish washer, bathroom toilet, bathroom sink, furnace, air conditioning unit, water heater, and ceiling lights.
- Tuck pointing was done on the foundation with Type N mortar.
- A new electrical meter base was installed.

- The doors and windows were boarded up to prevent vandalism and further damage.
- During the summer of 2011, the west wall was completely covered in wood siding salvaged from another location.

INTRODUCTION

Persons Involved With the Project

Emily Husted – Master of Science in Historic Preservation graduate student, Ball State University, Muncie, Indiana.

Committee members:

- Duncan Campbell – Creative Project Chairperson
- Cynthia Brubaker – Creative Project Committee Member
- Susan Lankford – Creative Project Committee Member

Approximate Dates of the Project

Preliminary research and preparation was conducted between October 2010 and May 2011. Research and necessary field work was completed between June 2011 and March 2012. The final report was completed in April 2012.

Limitations of the Study and Report

The content of this project is limited to the expertise of the graduate student, who is actively enrolled in the Graduate Program in Historic Preservation at Ball State University. The graduate student does not have extensive expertise or experience in

dealing with in-depth condition and structural assessments and recommendations, or the development of detailed maintenance plans. Therefore, it is recommended that appropriate professionals be engaged for a more comprehensive study of these issues.

Statement of Significance for the Spurgeon House

William Spurgeon was born in Salem, Indiana on February 1, 1852. After studying medicine, Dr. Spurgeon relocated to Muncie in 1881. The doctor joined the Christian Church (Disciples) and became ordained as an elder in the First Christian Church of Muncie. He served as President of the Board of Trustees and Chairman of the Building Committee for the church. Dr. Spurgeon personally drafted the plans and superintended the construction of the church located at the corner of Jackson and Council Streets.[2] He constructed the house at 115 South Council between 1886 and 1892, on the lot directly north of the church.

The Spurgeon House is defined as a modest Folk Victorian home. The Folk Victorian style is generally defined by porches and symmetrical facades. There exist five subtypes of this style: front-gabled roof, gable front and wing, side-gable roof one-story, side-gable roof two-story, and pyramidal. These folk house forms are generally less elaborate than the styles they attempt to mimic. Primary focus areas for the applications of detailing are on the porch and cornice line. Porch supports are commonly Queen

[2] G. W. H. Kemper, ed., *A 20th Century History of Delaware County* (Chicago: Lewis Publishing Co., 1908), under "Dr. William A. Spurgeon," http://countyhistory.org/books/doc.dela3/066.htm (accessed September 25, 2011).

Anne-type turned spindles, or square posts with chamfered corners. Window surrounds are generally simple or may have a simple pediment above.[3]

The Spurgeon House is a cross-gable. The current porch columns have replaced the originals, but it can be inferred from the original pilasters on the two walls of the house from the porch that the originals were turned. The wood window surrounds are simple with a plain wood header. The small cottage has no intricate detailing and is modest in design.

Former owner, Martha Farmer, sought to have the home designated as a local landmark. Because the home is located within a National Register Historic District and was listed as contributing on the nomination, that was sufficient evidence of the home's historic status. The Spurgeon House received local landmark status as a single listing in Muncie in 1996.

Description of Methodology

In preparing this report, the first efforts were focused on establishing the building's context history and historic background from the nineteenth century to the present. To examine the Spurgeon House's historic background, chronology of ownership and construction, both primary and secondary sources were consulted.

The current appearance and condition of the building was documented in narrative form in the Architectural Description and Condition Assessment sections of the report. The building was documented in two ways. First, color photographs were taken

[3] Virginia and Lee McAlester, *A Field Guide to American Houses* (New York: Alfred A Knopf, 1984), 309-310.

to record and documents the building's current appearance and condition issues. Secondly, measured drawings were created to document the structure.

After the examination of the building's history, context, and condition a proposed rehabilitation design was developed. The corresponding color scheme was selected based on visual examination of the building and historical research of the architectural style. A cost estimate was created based upon the proposed design using the RSMeans Construction Data books located at Ball State University's Architecture Library.

List of Research Repositories Consulted

In an attempt to document the history of the Spurgeon House, a variety of research repositories were consulted to locate any materials that may provide guidance into understanding the building's history. These included:

Architecture Library, Ball State University, Muncie, Indiana

Bracken Library, Ball State University, Muncie, Indiana

Ball State University Special Collections, Muncie, Indiana

Chronology of Owners and Improvements

1886-1892	Construction by Dr. William A. Spurgeon
1892-1899	Additions by Dr. William A. Spurgeon
1903-1923	Improvements by Charles B. Smith and Edward Blue
1927-1932	Improvements by Samuel M. Hayden
1946-1962	Improvements by Jacob and Clara B. Kern
1969-1998	Improvements by Harold and Martha Farmer

1998-1999	Improvements by J-Rok Enterprises
1999-2005	Harold and Teresa Nichols
2005	Donated to St. Peter's Rock Foundation in Christ Church[4]

[4] William A. Spurgeon, Canter Township Deed Books, 1886-2005, Auditor's Office, Delaware County Courthouse, Muncie, Indiana.

CHAPTER 1

History and Background

Historical Background and Context History of the Old West End Neighborhood

Delaware County was organized on January 26, 1827, and shortly after Munseetown was designated the county seat. Due to a lack of good transportation, the town grew slowly in the beginning. David Gharkey platted much of the land in 1837, and at that time the population was only 320. The arrival of the Indianapolis and Bellefontaine Railroad in 1852 opened up new markets for agricultural products and was a leading force that helped to double the population from 1848-1854. Muncie was incorporated into a city in 1854. The post-Civil War era marked the change from an agricultural trading center to an industrial city. Within 30 years the city had 40 factories manufacturing a wide range of products.[5]

New growth came to the city when natural gas was discovered in 1886, one mile east of the city. Two years later, the Ball Brothers Glass Manufacturing Company moved operations from Buffalo, New York and quickly became one of the largest employers in

[5] U.S. Department of the Interior, National Park Service, *Old West End Historic District*, prepared by Muncie Community Development Department, National Register of Historic Places Nomination Form, 1986.

the city. During the 1890's Midland Steel, Indiana Iron Works, Muncie Wheel Company, and the Indiana Bridge Company all established offices in Muncie. These businesses employed many people in both managerial and labor positions. The east side of the city during this time became a popular residential location of the new industrial class. The west end appealed to some business leaders, but was favored more by a range of other employees from office personnel to laborers, mainly due to its proximity to the White River and the downtown business district.[6]

The Old West End neighborhood is recognized for its residential architecture. During the period from 1886-1910 following the discovery of natural gas, the neighborhood saw the construction of many homes for members of the city's oldest families, the expanding middle class, and the gas boom "nouveau riche". Many of the homes were constructed along the West End's tree lined streets reflecting the taste of these residents for various forms of Victorian architecture.[7]

Dr. William A. Spurgeon

William Spurgeon was born in Salem, Washington County, Indiana on February 1, 1852. He studied medicine under Dr. George H. Chute, of Freetown, Indiana in 1871. The following year he entered the Physio-Medical Institute at Cincinnati, Ohio. After one year he enrolled in the Physio-Medical College of Indiana, from which he graduated in 1875. Upon graduation Dr. Spurgeon entered a partnership with his former mentor Dr. George H. Chute, and they remained colleagues for two years. In April 1880, Dr.

[6] U.S. Department of the Interior, *Old West End Historic District*.
[7] Ibid.

Spurgeon relocated to Muncie. The doctor joined the Christian Church (Disciples), and devoted a significant amount of time to church work. He was ordained an elder in the First Christian Church of Muncie in 1881. He served as President of the Board of Trustees and Chairman of the Building Committee for the church. He drafted the plans and superintended the construction of the church located at the corner of Jackson and Council Streets.[8] He constructed the house at 115 South Council between 1886 and 1892, on the lot directly north of the Christian Church.[9] (Figure 1)

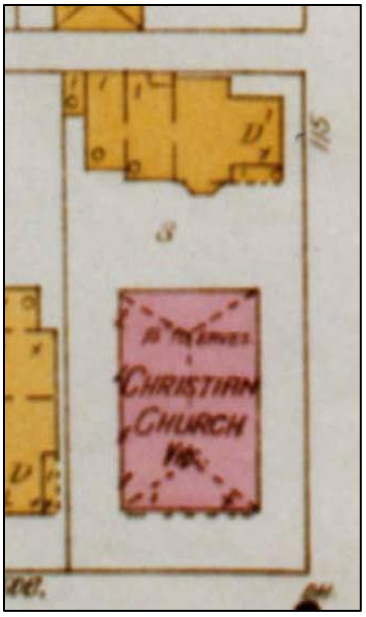


Figure 1: 1896 Sanborn Fire Insurance Map of Muncie Indiana. Source: Sanborn Map Company, *Insurance Maps of Muncie, Indiana 1896* (New York: Sanborn Map Company, 1896), sheet 3.

Victorian Architecture

Britain's Queen Victoria reigned from 1837-1901, and in American architecture those styles that were popular during the latter part of her reign, 1860-1900, are referred to as "Victorian." It was during this time in America that the industrialization and the growth of railroad transportation led to a change in architectural design and construction. The balloon frame began to replace heavy-timber framing, thus freeing houses from their traditional box-like shapes. Industrialization permitted complex house components to be mass-produced in factories and shipped throughout the country. These components included framing, doors, windows, roofing, siding, and decorative detailing. The

[8] G. W. H. Kemper, ed., *A 20th Century History of Delaware County*.
[9] William A. Spurgeon, Canter Township Deed Book.

Victorian styles reflect these changes through the use of complex shapes and extravagant detailing, which had previously been restricted to expensive homes.[10]

Many Victorian styles are loosely based on Medieval prototypes with multi-textured and multi-colored walls, asymmetrical facades, and steeply pitched roof lines. Despite the use of historic examples, little attempt is made to create historically accurate detailing. Instead, stylistic details are adapted from Medieval and classical precedents. This unrestricted use of architectural detailing means that most Victorian styles are combinations of other styles without a clear delineation that separate Greek, Gothic, and Italianate modes from the preceding Romantic era. These Victorian styles include Second Empire, Stick, Queen Anne, Richardsonian Romanesque, and Folk Victorian.[11]

[10] Virginia and Lee McAlester, *A Field Guide to American*, 239.
[11] Ibid.

CHAPTER 2

Architectural Description and Significance

Purpose for the Architectural Description

The purpose of this architectural description is to provide an overall physical description of features and materials. This will enable the rehabilitators to accurately identify the correct features and materials in need of treatment. The following section is illustrated with photo reference numbers in parentheses. Please refer to Appendix 1 for a thorough collection of color photographs.

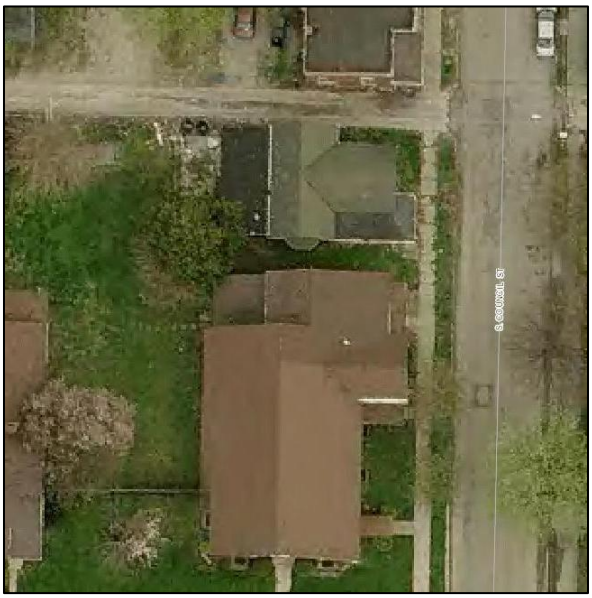


Figure 2: 2010 aerial photo of surrounding site context. Photograph by Delaware County, IN Beacon GIS, http://beacon.schneidercorp.com/Application.aspx?AppID=213&LayerID=2828&PageTypeID=1&PageID=1569.

Description of Exterior Features

Setting

The home at 115 South Council Street is located in Delaware County, Indiana. The structure is a one-story, wood frame building with a cross-gable

and asphalt shingle roof. The building sits back from the road approximately 6 feet with a concrete sidewalk approximately 2 feet away from the road. The St. Peter's Rock Foundation in Christ Church is directly south of the home, approximately 6 feet away, and a concrete alley is located north of the property approximately 1 foot away (Figure 2). A small two-story apartment building is located on the north side of the alley. Directly west of the building is a concrete slab approximately 11' x 6', and a chain link fence is located along the west property line.

Exterior Summary

The Spurgeon House is a Victorian cottage. All of the architectural features are original unless noted otherwise. It has a cross-gable or gable front and wings plan and is one-story high. The structural system is balloon frame and sits on a brick foundation. The horizontal wood siding was been covered with non-original asbestos shingles. All windows have non-original exterior aluminum storm windows. All doors and windows are currently covered with plywood. One porch is located on the south east corner of the home.

Figure 3: Photo of east elevation with surrounding site context. Photograph by Emily Husted, 18 November 2010.

East Façade

The east façade has three

bays (Figure 3) (001, 002, 047). The south bay has one glazed paneled wood door with simple wood trim along the top (004). It is centrally located within the bay, but is located on the cross-gable wall that is set back from the other bays approximately 7 feet. The two bays to the north are located on the gable end wall and each has one 4-over-4 double-hung wood window with simple wood trim (001). The cross gable wall extends to the north approximately 3 feet. A small air vent is located within the center of the gable end approximately 4 feet down from the ridge.

Figure 4: Photo of south elevation. Photograph by Emily Husted, 18 November 2010.

The front porch at the south east corner of the building extends east away from the building approximately 2 feet and overlaps the gable end east wall approximately 2 feet. (003, 004, 014, 015). The new wood porch deck is approximately 2 feet off the ground and has two concrete steps at the south east corner. Wood lattice, c.2006, skirts the floor (013, 014, 015). The porch roof is supported by five non-original turned wood columns (003, 014, 015). The porch has a tongue and groove wood board ceiling and the roof is a modified hip roof that joins with the southeast corner of the main building (006, 008, 009).

South Elevation

The south elevation has three bays (Figures 4 and 5) (003, 022). The west bay has a non-original 1-over-1 double-hung metal window with wood trim (021). Approximately 6 inches east of the window is a metal vent pipe that extends from the ground, rising vertically past the roof approximately 2 feet. The central bay has a projecting bay window with one non-original 1-over-1 double-hung metal window with wood trim on each of the three sides. The bay window is centrally located under the cross gable and projects from the building approximately 3 feet (016, 018). The east bay has one glazed paneled wood door with wood trim located approximately 1ft. east of the center bay. The front porch extends east from the building approximately 2 feet. The roof of the west bay is a shed roof that slopes to the west.

Figure 5: Photo of south elevation. Photograph by Emily Husted, 18 November 2010.

West Elevation

The west elevation has one bay (Figure 6) (023, 024). An original glazed panel door with a single-light transom is located off-center approximately 1 foot south (024, 026).

Figure 6: Photo of west elevation. Photograph by Emily Husted, 18 October 2010.

South of the door approximately 2 feet is an original window opening, but the window was removed at an unknown date. The asbestos shingles were removed at an unknown date exposing the original wood siding and parts of the plaster and lath. Plywood sheeting and wood boards were used to cover the exposed areas. The entire elevation is currently covered by wood boards and siding (025). The shed roof slopes toward the west.

North Elevation

The north elevation has four bays (Figure 7) (035,

Figure 7: Photo of north elevation. Photograph by Emily Husted, 18 November 2010.

043, 044, 045). The east bay has a 4-over-4 double-hung wood window with wood trim, centrally located in the bay (042). The center bay has a 4-over-4 double-hung wood window with wood trim, centered in the gable end (041). A coal chute is located in the brick foundation under the window (037). A small air vent is located within the center of the gable end approximately 4 feet down from the ridge (041). The bay directly west of the center bay has a 1-over-1 double-hung wood window with wood trim (039, 040). The far west bay has an original glazed panel door with a single-light transom (039, 040).

Foundation

The common bond brick foundation is constructed of original soft bricks. The foundation goes into the ground approximately 6 feet, and is visible approximately 1 foot above ground (129, 142, 143).

Roof

The building has a cross-gable roof and non-original green asphalt shingles (053, 002, 045, 046). The roof eaves and fascia are undecorated painted wood (051). Located over the west wing is a shed roof, sloping to the west (035). The porch has a hip roof (001, 002).

Description of Interior Features

Interior Summary

The interior of 115 South Council consists of five rooms. One of the main entrances is through door D1 located on the south elevation of the porch that leads into

room 1, the living room (060). The other main entrance is through door D2 located on the east elevation of the porch that leads into room 2 (067), the dining area, which opens into room 1 (059, 070). An enclosed bedroom, room 3, is located north of room 2 (079). The rear entrance is through door D3 on the west elevation that leads into room 4, the kitchen (101). Another side entrance off the alley is through door D4 on the north wall of room 4. South of room 4 is room 5, the bathroom (099, 116). The pantry, located at the southwest corner of room 4 has a hatch floor access to room 6, the basement (Figure 8) (117).

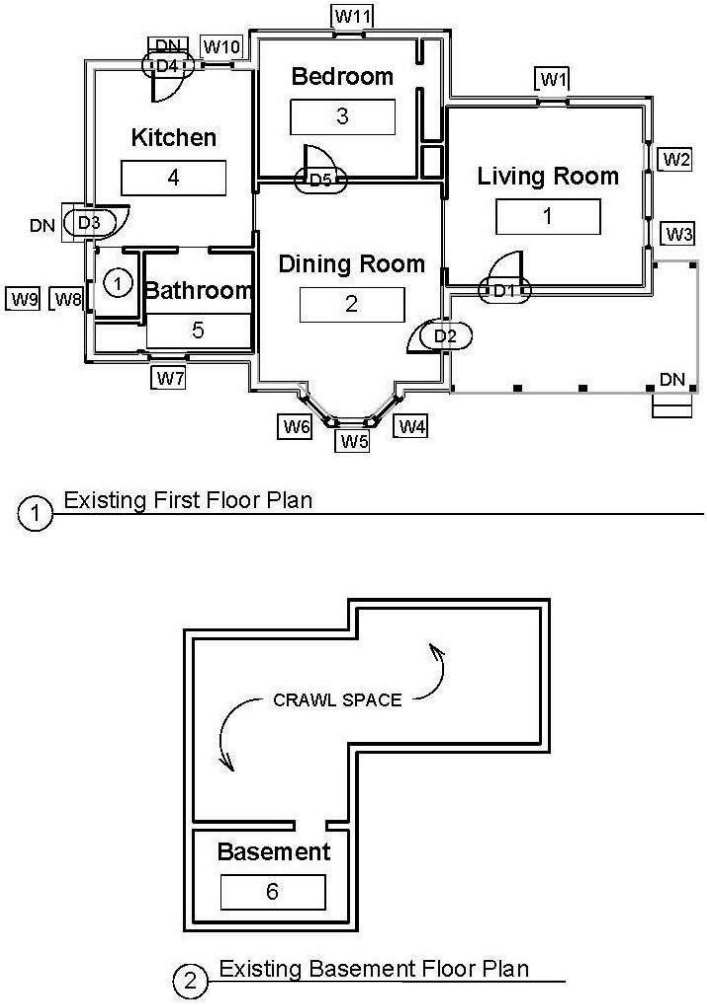


Figure 8: Floor Plan of the Spurgeon House (Not to scale). Drawing by Emily Husted, 10 February 2012.

The current owners disposed of some soiled materials and unwanted features, but many interior elements were placed in storage to prevent vandalism. The plaster throughout appears to be original.

Room 1 - Living Room

The exterior entrance into room 1 is from an original doorway, D1, located at the southwest corner of the space on the south wall off the porch (060). The door opening is surrounded by original, stained oak wood trim. Window W1 on the north and windows W2 and W3 on the east walls are surrounded with original, stained oak wood trim (Figure 9) (058). Plywood covers the bottom half of one of the windows on the east wall. All of the walls are plaster and lath. The non-original wood wall paneling that was removed left lines from the glue that was used to attach the panels to the wall (056, 057, 058, 059). A drop-ceiling had been installed, at an unknown date, but has since been removed by the current owners. The wood baseboards have been removed (056, 057, 058, 059, 060). The 6 inch wide tongue and groove pine wood floor remains throughout the home. The ceiling is plaster and lath (063). The room opens into room 2 on the west wall through an approximate 6 feet double-door opening with original, oak wood trim, though the double-doors do not remain (059, 065).

Figure 9: Photo of room 1 windows. Photograph by Emily Husted, 1 January 2012.

Room 2 - Dining Room

Figure 10: Photo of room 2 entrance and windows. Photograph by Emily Husted, 18 October 2010.

The exterior entrance into room 2 is from an original doorway, D2, located off the porch on the east wall of the interior room (Figure 10) (067). The wood trim surrounding the door has been removed, exposing the wood lath around the door. Windows W4, W5 and W6 of the bay window have original stained oak trim. All of the walls are plaster and lath (066, 068, 073). The original, oak wood baseboards remain on all walls (066, 068, 069, 070, 071, 073). The tongue and groove pine wood floor remains. The ceiling is plaster and lath (074).

Room 3 - Bedroom

Figure 11: Photo of room 3. Photograph by Emily Husted, 1 January 2012.

The entrance into room 3 is through an original door, D5, located on the south wall of the bedroom (Figure 11) (079). The door opening is surrounded by original oak wood trim and a single-light transom (091). The trim surrounding the door is stained on the dining room side (079) and painted on the bedroom

side (087, 088). Window W11 on the north wall is missing the bottom sash and is surrounded with original, stained oak wood trim (089). A small opening with no door on the east wall leads into a small closet (085). All of the walls are plaster and lath. The painted oak wood baseboards remain (085, 088). The tongue and groove pine wood floor remains. The ceiling is plaster and lath (086).

Room 4 - Kitchen

One of the exterior entrances into room 4 is through an original doorway, D3, at the southwest corner of the room located on the west wall (Figure 12) (101). The door and frame were removed when the west exterior wall was boarded up in the summer of 2011. The door opening is surrounded by original painted oak wood trim, which has also been removed (133, 134). The other exterior entrance is through an original doorway, D4, located on the north wall of the kitchen (096, 102, 104). The door is surrounded by original painted oak wood trim and a single-light transom (104). The interior entrance into room 4 is through an original opening at the southeast corner of room 4 located on the east wall (098). The opening is surrounded by original oak wood trim and a single-light transom. The trim is stained on the dining room side and painted on the kitchen side (080). Window W10 on the north wall is

Figure 12: Photo of the door and window on the north wall in the room 4. Photograph by Emily Husted, 2 February 2012.

surrounded with original painted oak wood trim (097). The window opening on the west wall, W8, remains, but the window and surrounding oak wood trim was removed at an unknown date (105, 076, 077). The walls are plaster and lath (092, 095, 096, 098, 100). The painted oak wood baseboards remain (098, 099). The tongue and groove pine wood floor remains. The ceiling is plaster and lath (108, 109).

Figure 13: Photo of room 5. Photograph by Emily Husted, 1 January 2012.

Room 5 - Bathroom

The entrance into room 5 is through a non-original door opening located on the north wall (Figure 13) (116). The original door was located on the east wall of room 5, but was filled in at an unknown date. The door opening is surrounded by painted oak wood trim on both sides (113). Window W7 on the south wall is surrounded with original painted oak wood trim (115). A small opening in the southwest corner located on the west wall leads into a small closet (111). The walls are plaster and lath. The painted oak wood baseboards remain (110, 113). The tongue and groove pine wood floor remains. Four pipes in the southeast corner stick

Figure 14: Photo depicting the aluminum vents in room 5. Photograph by Emily Husted, 8 October 2010.

out of the floor, three of which are PVC pipes and the other is copper. The ceiling is plaster and lath (112). One circular aluminum vent hangs from the ceiling and served the former hot water heater. A rectangular aluminum vent served the former furnace. Both are located in the southeast corner (Figure 14) (116).

Room 6 - Basement

The entrance into room 6, the basement, is through a floor hatch in the pantry located at the southwest corner of room 4 (117, 118). Wood stairs with nine treads lead into room 6 (Figure 15) (118, 128). The room does not extend to the full length of the home, but lies directly under the pantry and room 5. A crawl space lies under the rest of the home (137, 138, 139, 140, 142). The walls are the exposed brick of the foundation, ceiling is the exposed floor and joists, and the floor is concrete (121, 122, 127, 129, 131, 132). A basement hopper window, W9, is located on the west wall (130). A coal shoot is located in the north wall inside the crawl space directly under the window in the center bay (037).

Figure 15: Photo of the stairs leading into room 6. Photograph by Emily Husted, 6 February 2012.

Structural Wall, Floor, and Roof System

The Spurgeon House is a wood balloon framed one-story structure and the

bottom sill plates rest on the header of the floor system. The walls are framed more or less on 18 inches centers with full 2" x 4" studs on a 2" x 4" soleplate.

The structural floor system is composed of wood joists varying in size from 2" x 10" to 2" x 8". The first floor rests on top of 8" x 8" brick piers that appear to be set 16 feet apart. Large 8" x 8" timbers rest on top of the piers and to which the joists are attached. Crossbridging exists between the joists with no subfloor underneath the finish tongue and groove hardwood flooring. The orientations of the floor joists for each room are:

- Room 1 – north/south
- Room 2 – east/west
- Room 3 – east/west
- Room 4 – east/west
- Room 5 – east/west

The roof is constructed of 2" x 6" wood rafters and spaced approximately 2 feet on center with 2" x 8" wood purlins. The original wood shakes remain under the asphalt shingles (147, 150). Blow-in insulation remains.

Identification of Character-Defining and Significant Elements and Features

There are several significant features in the Spurgeon House that help to define its historic character and significance. The alteration or removal of these features would result in a loss of historic character. Special care should be taken to preserve these features as much as possible.

Exterior Features

Horizontal wood siding: Even though the original wood siding is currently covered by non-original asbestos shingles, every possible effort should be made to remove the shingles and restore the wood siding, replacing in kind when necessary.

Windows and doors and window and door openings: Although some of the original windows and doors have been replaced, the remaining original windows and doors and the original openings should be respected. Filling in or demolishing an opening would result in losing the overall character and image of the building.

Interior Features

Wood trim: The original oak wood trim surrounding the windows and doors and the oak wood baseboards add to the original character of the interior spaces. These should be restored using historically appropriate methods.

Wood floor: The original 6 inch tongue and groove pine wood floors are present throughout the building and should be restored.

CHAPTER 3

Architectural Conditions Report

Introduction

The following condition assessment includes recommendations for addressing each condition issue. These recommendations are general comments, primarily focused on rehabilitating the Spurgeon House to meet the *Secretary of the Interior's Standards for Rehabilitation*[12]:

1. A property will be used as it was historically or be given a new use that requires minimal change to its distinctive materials, features, spaces, and spatial relationships.
2. The historic character of a property will be retained and preserved. The removal of distinctive materials or alteration of features, spaces, and spatial relationships that characterize a property will be avoided.
3. Each property will be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding

[12] U.S. Department of the Interior, *The Secretary of the Interior's Standards for the Treatment of Historic Properties with Guidelines for Preserving, Rehabilitating, Restoring & Reconstructing Historic Buildings*, by Kay D. Weeks and Anne E. Grimmer (Washington D.C.: U.S. Government Printing Office, 1995), 62.

conjectural features or elements from other historic properties, will not be undertaken.

4. Changes to a property that have acquired historic significance in their own right will be retained and preserved.
5. Distinctive materials, features, finishes, and construction techniques or examples of craftsmanship that characterize a property will be preserved.
6. Deteriorated historic features will be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature will match the old in design, color, texture, and, where possible, materials. Replacement of missing features will be substantiated by documentary and physical evidence.
7. Chemical or physical treatments, if appropriate, will be undertaken using the gentlest means possible. Treatments that cause damage to historic materials will not be used.
8. Archeological resources will be protected and preserved in place. If such resources must be disturbed, mitigation measures will be undertaken.
9. New additions, exterior alterations, or related new construction will not destroy historic materials, features, and spatial relationships that characterize the property. The new work shall be differentiated from the old and will be compatible with the historic materials, features, size, scale and proportion, and massing to protect the integrity of the property and its environment.

10. New additions and adjacent or related new construction will be undertaken in such a manner that, if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.

It is expected that all historic building materials and character-defining features are to be protected and maintained; however it can be assumed that some of the existing historic fabric has become damaged or deteriorated over time and, as a result, more repair and/or replacement will be required.

Historic buildings are constructed of materials that often require specialized repair techniques, both to protect the materials themselves as well as to protect the overall historic character of the structure. The *Secretary of the Interior's Standards* provide accepted guidelines for restoring and rehabilitating historic buildings, but are not specific to every condition, and are therefore somewhat subjective and open to interpretation. In general, however, this report assumes that the original building materials shall be saved and appropriately repaired whenever possible, and that there are known techniques for accomplishing this goal. When original materials are deteriorated beyond repair, they may be replaced by like materials that accurately replicate the original in both composition and design. The rehabilitation specifications in this report strive to meet these principles.

This report acknowledges that repairing all deteriorated conditions may currently be cost prohibitive, thus requiring a commitment to phasing the repairs over an extended period. Many deteriorated conditions are not themselves serious enough to treat at this time, but the causes require prompt attention in order to prevent further damage. Unless

the deteriorated condition is an immediate threat to structural integrity, the priority is to recommend measures to prohibit further deterioration by correcting the conditions that are causing or contributing to it before treating the effects of the deterioration. It is generally more cost effective to treat causes than to repair their effects, and by setting priorities in this manner it should be possible to reduce long-term structural deterioration and maintenance costs.

No demolition was undertaken during the inspection of the Spurgeon House, and consequently certain inaccessible areas of the structure were not viewed. These areas primarily include the interior spaces of the walls, floors, and ceilings where wall, floor, and ceiling coverings prohibited access to structural members. In addition, the exterior surface of the roof was not accessible for close inspection. Although this report includes an assessment of the general condition of these areas based on observable evidence, photo documentation, and surrounding indications, specific conditions in each of these areas could not be verified.

The following section is illustrated with photo reference numbers in parentheses. Please refer to Appendix 1for a thorough collection of color photographs.

Conditions Assessment and Recommendations

The evaluation of the physical conditions of the Spurgeon House prioritizes the rehabilitation procedure for the entire project. Within each area discussed, the evaluation further prioritizes the procedure specific to each area and its condition. In some cases priorities overlap, may be handled simultaneously, or their order is less critical if the project is moving along rapidly. This is especially true on the interior, but obtains for the exterior as well. The objective, in general terms, is to seal the exterior to the weather as soon as possible. Interior work can wait until all exterior work is completed, so long as the completion is timely enough to prevent any weather damage to new work. If the windows cannot be worked on until later, a priority will be to assure that the existing windows are protected and that the window openings are sealed against the weather. The siding can then be repaired, and should be painted as soon as possible. As an option, the original siding should be at least back-primed prior to installation, and the window sash, if removed for repair, can be glazed and finish painted before they are reinstalled.

Stabilization Measures

As top priority, a number of stabilization measures should be taken to prevent further damage from occurring before the necessary repairs can be made.

- Stabilize the roof of the house and porch. If the necessary repairs to the roof cannot be promptly completed, stabilize the roof through tarps or other means to prevent further water damage.

- Ensure that all gutters and downspouts are working properly. If downspouts are missing, replace them as soon as possible or use a similar tube material to direct the flow of water away from the home (005, 050, 052). This is particularly crucial around the porch to prevent further water damage to the wood decking.
- Board up the broken basement window on the west elevation (031, 130). This will prevent water, dirt, debris, and other elements from causing further damage in the basement.

Exterior

Site

The surrounding area of the home is in fair condition. The ground itself is in good condition, but there is excessive vegetation growth. The concrete sidewalk running along the east side of the property is in poor condition. A large tree stump between South Council Street and the sidewalk has caused the concrete slabs to heave and crack (002). The concrete parking slab on the west side of the home, where the carport was located, has significant cracks (024, 025).

Recommendations – Site

1. Remove excess vegetation and tree stump.
2. Upon removal of tree stump, grade the earth and pour new concrete sidewalk.
3. Completely remove concrete parking slab, and distribute new soil and plant grass.

Roof

The roof should be secured from leaks as a first priority. The asphalt shingles appear to be in very poor condition; however the shingles could not be inspected at close range so their exact condition is not certain (002, 017, 045, 046, 053). The majority of the roof appears to be functioning at this time. The rafters appear to be solid and in good condition (145, 146, 147, 148, 149, 150, 151, 152). There is no evidence of water infiltration in the ceilings, with exception to room 4, which leads to the conclusion that the roof has minimal or no leaks. The original wood shingles remain under the asphalt shingles and will need to be removed by the roofer so new plywood deck can be properly installed.

The west end of the home, however, shows significant signs of water damage. Approximately 20% of the ceiling has saturated and broken lath in the ceiling, which is sagging, indicating a roof leak (024, 034, 094, 109). Inspection of the attic space indicates a leak. The blown-in insulation is saturated with water over room 4 (153). The absence of approximately 22’ of gutter on the west elevation has led to significant water damage of the fascia and eave boards (032, 033, 034). In addition to the roof repairs in this area, approximately 22’ of new fascia and eave board to match the original will need to be installed, as well as a new gutter. Further inspection will be required to assess any damage that may have occurred to the entire west wall.

The roof above the bay window on the south wall shows signs of water damage and the fire in March 2012 caused some damage (155). Approximately 3' of fascia board is missing, leading to further water damage (016, 017, 018). The current roof material is

asphalt sheeting, which will need to be replaced with a new sheet or metal materials after approximately 7’ of eave board and 3’ of fascia board is replaced and repairs are made to the decking.

The fascia returns on the roof do not allow for easy installation of gutters. Approximately 14’ of gutter was improperly installed along the north wall, causing the gutter to sag and drip water onto the foundation (045, 046). Correction of this problem is recommended to be completed as soon as possible, to allow the foundation to dry out.

Recommendations – Roof

1. Remove existing wood and asphalt shingles from entire roof. Inspect deck at eaves for wood deterioration and repair as required. Install new flashing and three-tab asphalt shingles in dark gray.
2. Install new fascia board on west wall-22 linear feet (lf) 1” x 6” poplar. Prime and paint with two coats good quality exterior semi-gloss acrylic latex paint.
3. Install new eave boards on west wall-22 lf 1” x 6” poplar. Prime and paint with two coats good quality exterior semi-gloss acrylic latex paint.
4. Reattach or replace as necessary metal ridge caps if deteriorated, 54 lf.
5. Remove asphalt sheeting from bay window. Inspect deck at eaves for wood deterioration and repair as required. Install new fascia board where missing-3 lf 1” x 3” poplar. Repair/secure existing fascia boards as required. Prime and paint with two coats good quality exterior semi-gloss acrylic latex paint. Replace damaged eave boards-7 lf 1” x 4” poplar. Prime and paint with two coats good

quality exterior semi-gloss acrylic latex paint. Install new flashing and three-tab asphalt shingles in dark gray.

6. Reinstall porch gutters and east wall gutters, and existing downspout on north wall. Install 5" round aluminum gutters at the north and west eave lines. Install 4" round aluminum down spouts at each corner. Provide splash blocks and assure water flows away from the building perimeter (39 lf gutter; 60 lf down spouts; 6, 36" concrete splash blocks).

Structural Wall and Floor Systems

Although the walls of the Spurgeon House are covered it can only be assumed that the structural system is in good condition. There is no buckling, bowing, or other evidence of damage underneath the plaster and lath. Further inspection of the west exterior wall, which was exposed to the elements for an extended period of time, will need to be conducted to determine the extent of the damage there. Significant water damage may have deteriorated the studs and joists.

The floor joists are in good condition, though some have splits. A couple instances of white mold caused by moisture were found. It is seen on various joists and floor boards directly under room 4 in the crawl space and also along the perimeter.

Relatively minimal termite damage was detected. The most significant of which was in the soleplate of the south west foundation of room 6. The damage has compromised the structural integrity of the board. Other minimal termite damage was found in the joists at the north east corner below room 3, and another joist located along

the south wall of room 6 has apparent termite damage (144). This damage has not compromised the wood, and there does not appear to be any active termites within the members.

Recommendations - Structural Wall and Floor Systems

1. Further inspect the structural elements of the west elevation and make necessary repairs
2. Remove all trash and debris from room 6 and crawl space. Take inventory of all items and determine which pieces can be utilized in the rehabilitation or sent to an architectural salvage business. Dispose of all trash and donate unwanted items.
3. Allow room 6 and the crawl space to dry. Open vents or use mechanical means to properly dry out the space.
4. Scrape of the visible mold when wet to prevent sending spores into the air. After the mold has been removed, kill it by spraying a mixture of bleach and water, or other solvent such as paint thinner. Keep home well ventilated and dry to prevent further mold problems.
5. Hire a professional exterminator to ensure the elimination of all termites.
6. Replace in kind the soleplate that was deteriorated by termites.
7. Fill damaged areas of joists with minimal termite damage with an epoxy wood filler and hardening product.

Foundation

The foundation of the Spurgeon House appears to be in sound condition. One of the main issues with the foundation is spalling brick around the bay window where concrete parging was placed over the bricks causing water to become trapped, approximately 60 bricks (019, 020). Another issue is that bricks have become loose due to failing mortar (036). Much of this deterioration has been caused by water. Removal of the vegetation from around the foundation will enable further investigation (019, 036, 038, 048). Tuck pointing was completed with type N mortar on certain areas of the foundation. Approximately 17' of the foundation on the west elevation has been repointed at unknown dates with different types of mortar (027, 028, 029, 030). Though the repair work is not consistent the foundation appears to be in sound condition. Further investigation will reveal if the area needs to be addressed.

Approximately 5' of the south end of the foundation on the west elevation needs to be rebuilt. The basement hopper has become dislodged causing the surrounding foundation to shift (031, 130). The west end of the north elevation also needs to be rebuilt, approximately 3'. A natural gas regulator protrudes out from the foundation and has caused the surrounding bricks to shift (036).

The foundation walls of room 6 are in fair condition, but approximately 50% of the south and west walls need to be repointed with type O mortar (121, 122).

Recommendations - Foundation

1. Remove all the vegetation from around the foundation and exterior walls.

2. Grade the earth around the foundation to allow for proper drainage. This will allow the bricks of the foundation to dry out, to enable further assessment of the condition.
3. Replace spalled bricks around bay window. If able, reuse the existing bricks by turning them around so that the spalled surface is now on the inside. If unable to reuse the brick, replace with a brick that is similar in color and composition. Extra original bricks remain in the crawl space. Repoint the area with type O mortar.
4. Ensure the necessary precautions are taken to stabilize the building before addressing the foundation.
5. Repair southwest foundation. Make necessary repairs to the basement hoppers (see *Windows and Doors* section for further details) then reuse existing bricks to rebuild foundation utilizing type O mortar.
6. Repair northwest foundation by reusing existing bricks and type O mortar.
7. Repoint 50% of the foundation in room 6 on the south and west wall.
8. If bricks need to be replaced, a number of original bricks remain loose in crawl space of room 6 (137).

Exterior Walls

Currently, the original horizontal wood board siding is covered by asbestos shingles, with the exception of the west elevation, but the intent is to restore the original wood siding underneath (001, 002, 022, 035). Removal of these shingles will enable further investigation of the condition of the original siding. Presently, only a small

portion of the asbestos shingles on the east wall has been damaged exposing the wood siding (048, 049). In this area, termite damage is present and the siding will need to be replaced; approximately 1 lf. of damage is visible at this time.

The majority of the blown-in insulation in the walls is most likely in good condition, though it could not be fully investigated. The insulation on the west wall, however, has been saturated with water and will need to be addressed.

Blown-in insulation is not recommended for a number of reasons: Unsightly plugs destroy the appearance of the exterior siding; no vapor barrier is achieved; condensation may collect on the interior side of the beveled siding causing the final exterior paint to fail prematurely, by loading the siding with moisture that evaporates through the wood to the exterior, blowing off the paint and undermining the condition of the wood. The use of plastic wedges installed between pieces of siding can help the wall to breath, thus reducing the condensation problem, but this is an imperfect solution. In addition, blown-in technology frequently leaves voids in the wall that the insulation failed to reach, and blown-in material settles over time, leaving the upper areas of the wall without insulation.

If insulation is desired, it should be installed from the exterior side, by first removing all of the existing siding on each facade, installing 3 ½" fiberglass paper or foil backed batts between the wall studs, and then reinstalling the siding. Though labor intensive, this technique assures the preservation of the interior plaster and lath and creates the opportunity to prime the interior faces of the beveled siding prior to

reinstallation. Priming will reduce the risk of any condensation damage to the siding once the walls are insulated, assuring a longer lasting exterior paint job.

The total surface area of the exterior walls is approximately 1915 sf including window and door openings. The total surface area for the windows is approximately 180 sf, and the total surface area for the door openings is approximately 70 sf. Less window and door openings, the total façade area of the building is approximately 1665 sf.

A small fire occurred on March 19, 2012 at 4:30am outside the bay window on the south elevation. The house was fully boarded up and no one was inside the home when the Fire Department arrived. The fire was reported and promptly extinguished, limiting fire damage to the bay window, though there is some smoke and water damage to room 2. The cause of the fire was not determined, but with no utility connections, lighting in the area, and no one inside the home would lead one to believe it was arson. The fire damaged the surrounding wood frame and approximately 2 sf of lath around W6 (153, 154, 155, 156, 157). Further inspection of the damage will need to be conducted.

Recommendations – Exterior Walls

1. Carefully remove all exterior siding; mark each piece to identify location.
2. Prepare/repair original siding as necessary and prime back sides of all original siding and new siding to be reinstalled.
3. Install backed 3 ½" fiberglass insulation in stud spaces (18"on center); staple to studs; 1665 sf.
4. Reinstall and repair all window and door trim as necessary; replace missing window and door trim (see below under Windows and Doors).

5. Reinstall approximately 3816 lf of original siding and approximately 2580 lf of new siding to match original in manner suggested above.
6. Prepare, caulk, prime, and paint all with two finish coats of good quality acrylic latex exterior paint.
7. Reconstruct wood frame around W6.
8. Install new window trim around W6 to match existing trim.
9. Make necessary repairs to the bay window area caused by the fire.

Windows and Doors

Exterior windows and doors and their trim moldings, transoms, headers, etc., are considered key elements in defining the historic character of buildings as they appear to the public view. For this reason, their rehabilitation should take precedence over less critical aspects of a building's construction details. Replacement should be a last resort. Security is of course an important consideration, so hardware must be made to function or be replaced with appropriate styles with working locks. Storm windows and doors, although an additional expense, are recommended for energy efficiency as well as the protection they provide for the newly restored units. All of the storm windows remain over existing windows, under the plywood, and may be reinstalled. If new storm units are needed, care should be given to selecting a style of new storm units that does not obscure the original window or door. Storm windows should be installed on the window frame stop, rather than on the exterior casing.

There are ten window units and one window opening. Windows W1, W2, W3, and W11 are original 4-over-4 wood windows with two moveable sashes (056, 057, 058,

061, 062). The bottom sash of W11 has been removed (089. 090). A broken window sash was located in the crawl space and may be from W11, but was not positively identified as the missing sash. W8 is the same type as the previously mentioned windows; the window and frame have been removed, but it appears that all elements of the window and frame remain in the house (076, 077). W9 is an original wood basement hopper, but the glass is missing and the frame has been dislodged (031, 130). W10 is an original 1-over-1 wood window with two moveable sashes (097). Windows W4, W5, W6, and W10 are non-original 1-over-1 metal windows with two moveable sashes (068, 115). W6 was severely damaged by the fire in March 2012 (153, 154, 157). The glass in the top sash of W5 cracked during the fire. The sashes are in varying states of deterioration. Some of the glass is missing or broken. Where the original glass is intact it should be removed and stored for reinstallation. Further inspection of the sashes will reveal problems with sash cords and counter weights. New sash cord should be installed for each sash pair, if needed. Many of the sashes appear to be in relatively sound condition, others are missing the sash muntins (061). Even those that appear sound, however, are likely to be loose where the rails and stiles join at the corners, or where muntins join sash frames. Frequently, sill and the lower portions of the window jambs are deteriorated. Most of these problems can be repaired using a combination of wood epoxy and dowels or screws without having to dismantle the sash or jamb. Where the sashes have come apart, they should be repaired whenever possible. If individual sash pieces are deteriorated beyond repair, replacement by the piece is recommended. When entire sash are missing or otherwise require replacement, the new sash should match the originals in all details.

The sash should be removed for repair, and the repairs should include scraping or finish sanding and priming prior to the installation of glass. Once reglazed, the window sash should receive two coats of paint. Painting over the glazing putty will give it a longer life, seal it to the glass, and help prevent mildew growth.

Only portions of the exterior window trim could be inspected since the units were boarded up. It must be assumed that the wood trim will require scraping or sanding, minor epoxy or wood filler repairs, and painting. Typically, the exterior wood sills are in the worst condition. They can be consolidated with wood epoxy, but should be replaced if rotted beyond repair.

The condition of the four exterior doors varies. D1 is intact but is missing the glazing (060). D2 is intact on the exterior, but its trim is missing on the interior and the glazing is also missing (067). D3 is intact and retains its glazing. D3 and its transom and frame are not in place, but exist inside the home (101, 083, 084, 133, 134, 135). D4 is intact but is missing the glazing and some decorative exterior detailing (102, 103, 104).

In general, throughout a job of this scope, it is more cost effective to repair windows and doors than to replace them with new units.

Recommendations – Windows and Doors

1. Remove window sash and repair as specified above.
2. Locate missing window and frame and repair.

3. Remove three exterior doors and repair. Locate missing door and frame and repair or replicate to match originals. Repair existing or install new locking hardware per door.
4. Repair exterior window and door trim as necessary.
5. Sand, prime and paint all window sashes, doors, and exterior window and door trim with two coats good quality exterior acrylic latex paint.
6. Install new aluminum exterior storm windows. Install new aluminum exterior storm doors.

Porch

The original entry porch remains, but the wood columns and porch deck have been replaced (002). The reconstructed porch floor is uneven and needs to be rebuilt (012, 013, 014, 015). The wood columns show signs of deterioration and will need to be removed and repaired (010, 013). Inspection of the porch roof shows that approximately 50% of the roof deck and all of the rafter tails to be in poor condition, and show severe water damage indicating the presence of a leak (004, 005, 006, 007, 008, 009, 055). Approximately 18' of downspout is missing from the porch, causing water damage along the exterior walls and porch decking (005, 050). Replacement downspouts are recommended, to be installed as soon as possible.

Recommendations – Porch

1. Completely remove the porch roof, floor and wood lattice. Approximately 90% of the porch floor can be reused.

2. Make any necessary repairs to the brick piers and straighten the wood joists to ensure a level floor. Existing and new floor boards should be sanded, treated with a wood preservative, and painted with two coats good quality exterior semi-gloss acrylic latex paint.
3. Remove the wood skirt around the wood columns and use a wood epoxy to repair the bottom of the columns. Sand and treat the columns with a wood preservative and paint with two coats good quality exterior semi-gloss acrylic latex paint before reinstallation.
4. Reconstruct rafters and roof deck. Install new flashing and three-tab asphalt shingles in dark gray if the pitch is greater than 3/12. If the pitch is lower than 3/12, install an asphalt sheeting and metal roof.
5. Approximately 50% of the existing tongue and groove wood ceiling can be reinstalled. Replace the rest of the ceiling with tongue and groove wood to match the existing. The ceiling boards should be sanded, treated with a wood preservative, and painted with two coats good quality exterior semi-gloss acrylic latex paint.
6. Wood lattice should be sanded, treated with a wood preservative, and painted with two coats good quality exterior semi-gloss acrylic latex paint, then reinstalled.

Exterior Stairs

There are two sets of exterior stairs; two concrete steps at the southeast corner of the porch (054), and two concrete steps at the north exterior door (039). A wood stoop was located at the west exterior door, but was removed when the elevation was boarded

up in 2011 (023, 024). Now a small concrete block remains in front of the door location (025, 029). Though these stairs are functioning, the absence of railings and improper tread heights fail to meet code requirements.

Recommendations – Exterior Stairs

1. Remove all existing concrete steps.
2. Install new porch steps with two railings per Indiana State code. Wood, stone, concrete, or brick may be used. If wood, treat with a wood preservative, and paint with two coats good quality exterior semi-gloss acrylic latex paint.
3. Install new steps at north entrance with two railings per Indiana State code. Wood, stone, concrete, or brick may be used. If wood, treat with a wood preservative, and paint with two coats good quality exterior semi-gloss acrylic latex paint.
4. Install new steps at west entrance with two railings per Indiana State code. Wood, stone, concrete, or brick may be used. If wood, treat with a wood preservative and paint with two coats good quality exterior semi-gloss acrylic latex paint.

<u>Interior</u>

Interior Walls and Ceilings

The condition of the plaster on the interior walls and ceilings varies from room to room (056, 057, 059, 063, 064, 066, 067, 071, 074, 086, 110, 113, 114). Especially where water has entered ceilings and walls, conditions are very poor (092, 094, 095, 096, 098, 099, 100, 101, 108, 109). The fire in March 2012 caused some damage to the lath

below W6 (156). As with any significant historic fabric, original plaster should be retained whenever possible. Replacement with gypsum board walls will never capture the character of hand applied plaster, nor will it be as durable. Repairing plaster, however daunting for the inexperienced, can be accomplished for the same or less cost if approached on an as needed basis.

The alternative, replacing the plaster with gypsum board, would require first the removal of all the remaining plaster and lath and its disposal. All of the trim would have to be removed, marked, and reinstalled in its exact location. Such removal nearly always results in extensive damage to the original woodwork—splitting, nail hole damage, and tool marks—and greatly increases the cost of rehabilitating the trim. Reinstallation requires altering window and door jamb widths since drywall and plaster are not the same thickness, and frequently the trim still does not fit correctly since it is impossible to get everything back just as it was. For these reasons, and the additional fact that most of the remaining plaster can be repaired, the recommendation is for repair over replacement.

Essentially four conditions exist: **1)** Plaster or plaster and lath is missing altogether, or so undermined that it cannot be repaired (lath is rotted, plaster is rotted, or both) (034, 092, 094, 109, 156); **2)** Plaster is missing in smaller amounts, one to five square feet, but lath is in good condition and largely in place (099, 113); **3)** Plaster is intact over lath, but is loose from the lath as indicated by the ability to move it and the presence of cracking or delamination (063, 094, 110); **4)** Plaster is tight to the lath, but indicates minor cracking or crazing across its surface (056, 057, 059, 071, 074, 085, 086, 096).

Each condition requires a somewhat different solution: **1)** Install new lath (diamond mesh metal lath is acceptable) and scratch, brown, and finish coats of plaster after removing rotted lath and plaster as necessary; **2)** Install three coats of plaster over existing lath after removing any dead plaster; **3)** Reattach existing plaster with plaster washers and screws, tape with plastic mesh tape, and apply appropriate coats as necessary to achieve smooth finish; if cracks are separated or greater than ¼", secure with plaster washers and screws on either side of the crack, tape, and apply coats as necessary to achieve smooth finish; **4)** For tight cracks, washers are not required, taping is optional but preferred, apply finish skim coat.

The fire that occurred in March 2012 caused some slight smoke damage to the ceiling and upper parts of the walls of room 2 (158, 159). The damage is only to the surface of the plaster and layers of paint.

The proposed change to the north wall of the bathroom will eliminate the existing non-original door. The opening will be filled in with studs and new plaster and lath. The bathroom door will be relocated to its original location on the east wall of the bathroom. See proposed design section for further details. The following chart will take this alteration into consideration.

The following chart (Table 1) summarizes the condition of the plaster walls and ceilings for each room by number followed by photo references, and provides: approximate total square footage of ceilings and walls and square footage of walls and ceilings requiring new lath and plaster (**1** & **2** above), the percentage of the wall area and ceiling area that requires reattachment with plaster washers and screws, taping and skim

coating (**3** above), and the percentage of the wall and ceiling areas that require crack taping and skim coating (**4** above).

Square Footage	**New Lath & Plaster**	**Attach w/ Washers**	**Tape & Skim**
Room 1			
Ceiling 210	N/A	5%	10%
Walls 415	1 sf	5%	15%
Room 2			
Ceiling 231	N/A	5%	5%
Walls 395	20 sf	5%	10%
Room 3 (Numbers include the attached closet)			
Ceiling 132	N/A	3%	15%
Walls 358	N/A	3%	5%
Room 4 (Numbers include the attached pantry)			
Ceiling 185	120 sf	25%	10%
Walls 485	145 sf	25%	40%
Room 5 (Numbers include the attached closet)			
Ceiling 74	N/A	5%	10%
Walls 312	21 sf	5%	10%
Location	**New Lath & Plaster**	**Attach w/ Washers**	**Tape & Skim**
Ceilings	122 sf	129 sf	15 sf
Walls	185 sf	169 sf	315 sf
TOTALS	305 sf	298 sf	330 sf

Table 1: Plaster wall and ceiling conditions with approximate square footage/ percentage to be repaired.

The total areas requiring repairs other than new plaster repairs were estimated as percentages of ceiling and wall areas during the inspection of the Spurgeon House. These percentages are converted to square feet in the totals seen above for the purposes of estimating costs. It should be emphasized that these totals are based on sight

inspection only, and that typically once work is begun conditions may be somewhat worse than anticipated, and square footage in need of repair may increase due to the removal of dead plaster or rotten lath. For this reason a contingency of ten percent is anticipated for the plaster work.

Recommendations – Interior Walls and Ceilings

1. Clean existing plaster in preparation for repairs by removing loose paint, glue residue, wallpaper, and dirt on walls and ceilings throughout entire interior: 3460 sf.
2. Reattach loose plaster as necessary on ceilings and walls with plaster washers and screws.
3. Tape and secure cracks and crazing as necessary. Apply new veneer plaster finish only as necessary to repair cracks, crazing, washers, and associated damage to achieve smooth and unified finish to match existing.
4. Install new plaster or plaster and lath in areas where required.
5. Paint all ceiling and wall surfaces with breathable primer and two coats of good quality breathable interior latex paint. (ceilings: 1494 sf; walls: 1965 sf)

Interior Doors

One of the interior doors remains hung in its original location. Three interior doors are loose in the house, but have been removed from their original openings. No attempt was made to identify the original location for each loose door, but a full count of those present, those missing, and those loose reveals that a total of three additional doors

are needed, excluding the closet doors, if each opening is to have a door. Only two transoms are needed.

The proposed design for the new bathroom door on the west wall of the dining room will require a new door to match the style of the other doors inside the home. The recommendation to meet *Secretary's Standards* is that any new doors may closely match the originals in order to maintain the character of the building, but new wood doors can also be built with a simpler configuration, such as flat panels instead of raised panels, or two panels instead of four.

The general condition of the doors, both loose and hung in place, is good. Some latch hardware is missing or inoperable, although many of the hinges are present on the loose doors. Verifying a loose door's location can often be done by matching door hinges to jamb mortises or jamb hinges to hinge mortises on the doors. Moreover, the doors all vary slightly in height which should also facilitate identifying their original locations.

All of the existing doors will need to be cleaned, painted, and, where appropriate, rehung. Latching hardware should be installed as necessary. The chart below (Table 2) identifies room location, the doors and transoms that are hung and their condition, doors missing, and doors and transoms that are not hung (loose) and their condition and room location. Each of the main rooms is listed, but not the exterior entry doors. It may be that not all of the loose doors are on this site, or are stored in another location not known to the consultant, but for the purposes of estimating replacement cost and repairs, the totals below are used.

Room	Hung	Condition	Missing	Loose	Condition	Photo
1	0	-	-	1	ok	56
2	0	-	1	3	Ok, 1 trans missing glass	075, 080, 081, 082, 083, 084
3	1	Good, 1 trans missing glass	-	-	-	087, 088, 091, 078, 079
4	0	-	1	-	-	100
5	0	-	1	0	-	099, 113
TOTAL	1	Good, 1 trans missing glass	3	4	Ok, 1 trans missing glass	-

Table 2: Door conditions

Recommendations – Interior Doors

1. Field verify door counts and exact locations for loose doors. Determine, size, location and style of replacement door desired and order off the floor or custom made.
2. Clean and repair and make fully operable and re-hang as necessary all of the existing doors.
3. Install one new replacement door on new hinge hardware if original hinges are missing (applicable to new door for room 5).
4. Clean and repair all existing interior rim lock latch sets if condition allows reuse. Install new interior latch sets to match originals as closely as possible.
5. Prepare, prime, and paint all doors with good quality interior semi-gloss acrylic latex paint.

Interior Trim and Floors

The overall condition of the interior window, door, and baseboard trim is very good, and with a few exceptions, is in place. All of the trim needs to have the loose paint removed and any additional sanding and washing necessary as preparation for painting. During this process, loose nails should be removed, and miscellaneous holes, scrapes, and dents filled with wood epoxy or spackling compound.

There are many relatively small areas where repairs and replacement are required. The baseboards in room 1 have been removed (056, 057, 058, 059). They may be loose in the home or in storage, but if they cannot be located, replacement trim to match will be needed. A small 1 ft piece of trim is missing from the opening between rooms 1 and 2 on the room 1 side (065). The interior trim around door 2 is missing, though it may be loose in the home or in storage (067). If it cannot be located, replacement trim to match will be needed. The interior trim around door 3 has been removed, but may remain in the home (101). The window trim at the top of W6 and part of W5 was damaged in the fire in March 2012 (158). The fire damage will need to be inspected further, but appears to be to just the surface of the wood. Window trim around W8 has been removed, but remains in the home (105, 076). Approximately 3’ of door trim is missing from the closet opening in room 5, as well as some baseboards (113). Because this door opening is not original, the trim will have to be replaced, when a new door is installed in the original location. Baseboard trim removed from the location of the new door can be reused in room 5 (071).

The floors are worn in many locations, but not beyond use. They are intact in most rooms, although there is some buckling and warping, especially where moisture has been present. Various rooms have holes in the floors, or metal patches over holes, especially in room 5, and these need to be repaired. Original pine tongue and groove floors remain throughout the home in all rooms. Carpet had been installed at some date and removed, leaving varying degrees of glue residue. Approximately 50% of the floor in room 4 is saturated with water, most likely due to a water leak in the roof. After the debris is cleaned out of the home and floor is allowed to dry, further inspection will be needed to determine if the floor can be retained.

Recommendations – Interior Trim and Floors

1. Carefully remove loose paint from all trim in rooms 3, 4, and 5 using the gentlest means possible. Avoid abrasive measures.
2. If the existing varnish on the trim in rooms 1 and 2 is in good condition, gently clean the piece of dirt and dust, only refinish when needed with appropriate finishes that match the existing.
3. If the fire damage to the trim around W5 and W6 is to the surface of the wood, sand the surface of the wood and refinish to match existing wood. If more significantly damaged, replace with in kind materials, approximately 3 lf.
4. Make carpentry repairs to repair, replace, recondition, and consolidate miscellaneous trim where missing or deteriorated. All repairs should use in kind materials that will have to be fabricated from new or used oak.

5. All trim to be finish painted (rooms 3, 4, and 5): remove miscellaneous nails, unnecessary hardware, and scrape, sand, and fill holes in preparation for painting. Prime and paint two coats interior acrylic latex semi-gloss paint.
6. Patch floor holes in all rooms as necessary. All repairs should use in kind materials that will have to be fabricated from new or used pine.
7. Repair loose boards, buckling, and cracked and broken pieces as required.
8. Clean and refinish (varnish) all original pine floors, approximately 840 sf.

Interior Stairs

The wood stairs leading down into room 6 are in poor condition and will need to be replaced. Because the basement hopper located in the west foundation has been dislodged, dirt, debris and water have been pouring into room 6 and onto the stairs (130). The structural integrity of the stairs has been compromised and they are no longer safe for use.

Recommendations – Interior Stairs

1. Completely remove existing stairs.
2. Install new wood stairs with two railings per Indiana State code.

Mechanical, Electrical, Plumbing

There is no mechanical heating or air conditioning equipment present in the Spurgeon House, however the former furnace and air conditioning unit have been placed in off-site storage. The previous location of the furnace was in room 5, as seen by the

remaining ducts (116). The furnace should be reinstalled in the basement, and the ceiling space in the basement may provide good locations for duct runs.

There are some electrical outlets and ceiling light fixtures in the rooms. Remnants of knob and tube wiring were found in the attic. The condition of the existing service appears to be too poor to warrant reuse. Further inspection will be required to validate this assumption, though it is likely that the entire structure will require all new wiring, outlets, fixture boxes, and service panel. Generally speaking, modern structures require a 240 amp service to carry appliance and lighting loads. Where walls are open, wiring should be installed before new plaster work. Otherwise wiring distribution can occur in the basement ceiling, as well as the attic. Feeds to wall locations should be pulled into the walls with minimum intrusion or damage to the existing wall, ceiling, or floor materials.

None of the existing plumbing lines are believed to be usable. No planning for number of bathrooms, kitchens, or associated areas requiring plumbing runs are currently complete, but for the purposes of this report, assume one full service kitchen, and one full bathroom.

Recommendations – Mechanical, Electrical, Plumbing

1. Install full electric service.
2. Install full plumbing service.
3. Reinstall existing furnace and air conditioning unit and new duct work. If furnace and air conditioning unit cannot be utilized, install full HVAC service.

Summary

This Condition Assessment and Recommendations section intends to provide an understanding of the important historic fabric of the Spurgeon House. The evaluation of the existing physical conditions of this fabric and the recommendations for repair intend to clarify and prioritize the required scope of work necessary to rehabilitate the site. Priorities are listed within each category or area of concern, and, in turn, the categories themselves appear in their order of importance. It should be clear that within this format many options remain. Certain decisions regarding the order and relative priority of the scope of work depend on whether all of the work can be undertaken in one phase or if certain tasks will be phased in later. Other decisions will depend on available financing over time as well as aesthetic considerations.

This report tries to make it clear that the ultimate survival of the Spurgeon House as a historic artifact and local landmark will require that most of the recommendations are undertaken in the manner prescribed. This is especially true of the scope of work regarding the most visible exterior and interior fabric. For this reason, the report strives to be explicit about the quality of the historic fabric and its current condition. As much as possible, the report not only recommends the work necessary, but conveys the approved methods for accomplishing that work when dealing with this specific structure as well as others that are valued for their historic significance.

Not all contractors are familiar with historic techniques and applications, regardless of their general skill. If contractors are requested to bid this work, and they should be, it is important that they read the entire report in order to understand the

recommended methods as they relate to historic buildings in general and to the Spurgeon House in particular. The eventual choice of a contractor may depend as much on his or her ability to apply the prescribed methods as it does on the bid price. The Cost Estimate section that follows is intentionally placed apart from the Condition Assessment and Recommendations section so that the cost estimates need not be provided to contractors bidding the work. This will assure uniform bidding at competitive rates.

CHAPTER 4

Cost Estimate

A cost estimate was developed to determine approximate costs of rehabilitation. It represents national averages for costs associated with the recommended repairs, and looks at the job as a whole. Local contractors, especially painting contractors, may be capable of accomplishing this scope of work for less money than is represented here.

This estimate was produced using RSMeans Construction Data books located at Ball State University's Architecture Library. The estimate is formatted by divisions. At the end of each division is a total cost for that segment of the project.

There are a few notes that the reader should be aware of:

- Costs for general conditions and contingencies are added to the final total to anticipate contractor's set up costs and unknown construction contingencies respectively. This is normal estimating procedure. Line item costs include contractor's overhead and profit. The use of qualified volunteers and unpaid laborers when applicable will reduce the overall cost.

- The cost estimation reflects all of the suggested treatment recommendations. The church can value the importance of each recommendation and prioritize accordingly to reduce costs.
- Donated building materials may also be a way to minimize the cost of the overall project.

There are also a number of optional costs:

- Complete Kitchen System Components. This option includes new wood cabinets, plastic laminated countertop, steel sink and faucet, dishwasher, and stove and vented range hood. The church has in storage the following items that were removed from the home: kitchen cabinets, kitchen sink, and dishwasher. Depending on the condition of these items, the church may choose to use these existing components to reduce costs.
- Water Heater. This option includes a new 30 gallon gas water heater. The church has in storage the water heater that was taken out of the home. Depending on the condition of the water heater, the church may reinstall it to reduce cost.
- Bathroom Plumbing and Fixtures. This option includes the plumbing and fixtures for the bathroom. The church has in storage the toilet and bathroom sink that were removed from the home. Depending on the condition of these fixtures, the church may reuse them to reduce costs.
- Complete Heat Generating Heating and Cooling System. This option includes a complete heating and cooling system to 1200 sf. The church has in storage an air

conditioning unit. Depending on the condition, the church can reinstall the air conditioning unit and purchase a heating unit to reduce costs.

- Ceiling Light Fixtures. The church has in storage many of the ceiling lights. Depending on the condition the church may reuse these fixtures to reduce costs.

Division	Reference Number	Demolition - First Floor & Site	Total O&P	Total Units	Unit	Total Cost
31 13 13.20	2100	Remove stump with stump cutter	$157.00	1	Each	$157.00
02 41 13.17	5700	Remove concrete to 6" thick remove concrete patio, sidewalk, steps, and parking slab	$1.75	293	SF	$512.75
02 82 13.43	8100	Bulk asbestos removal asbestos Siding	$3.26	1704	SF	$5,555.04
02 82 13.47	0100	Collect and bag bulk material, 3 CF/bag by hand asbestos disposal	$13.85	63	Each	$872.55
02 41 19.23	0700	Dumpster, weekly rental 10 CY	$578.00	4	Week	$2,312.00
02 41 19.21	0580	Selective demolition of west kitchen wall, floor, and ceiling	$6.65	165	SF FLr	$1,097.25
02 41 19.21	0560	Selective demolition of basement steps	$6.00	66	SF FLr	$396.00
07 05 05	3180	Remove 2 layers asphalt shingles with tar paper	$1.22	1132	SF	$1,381.04
02 83 19.26	0050	Remove lead base paint on interior trim	$7.90	102	LF	$805.80
02 83 19.26	4800	Remove lead base paint on exterior wood siding and trim	$6.40	1704	SF	$10,905.60
					Total Demo	**$23,995.03**

Division	Reference Number	Roof	Total O&P	Total Units	Unit	Total Cost
07 31 13.10	0155	Install new asphalt roof shingles, class A, pneumatic nailed	$151.00	12	SQ	$1,812.00
07 25 10.10	0401	Asphalt felt paper, 15#	$0.20	1132	SF	$226.40
07 65 10.10	0100	Aluminum sheet metal flashing .032"	$4.74	44	SF	$208.56
07 71 23.30	0012	Install aluminum gutter on west elevation	$8.05	24	LF	$193.20
07 71 23.10	6700	Install aluminum downspouts, 3x4"	$19.70	2	EA	$39.40
07 71 23.20	0200	Downspout elbow, 3x4"	$10.10	3	EA	$30.30
					Total Roof	**$2,509.86**

Division	Reference Number	Masonry	Total O&P	Total Units	Unit	Total Cost
04 01 20.20	0600	Clean and repoint 30% of brick masonry foundation, soft mortar type O, common running bond. + 5% for cutting and patching to match existing construction	$7.27	32	SF	$232.64
04 21 13.40	0100	Structural brick, rebuild segments of foundation	$15.75	12	SF	$189.00
					Total Masonry	**$421.64**

Division	Reference Number	Windows	Total O&P	Total Units	Unit	Total Cost
08 52 69.10	2400	New double hung aluminum storm windows, painted white	$130.00	10	Each	$1,300.00
08 51 13.10	0050	New aluminum double hung sash window, to replace W6 that was damaged in fire	$49.50	1	Each	$49.50
09 91 03.30	0440	Scrape and sand 6 double hung windows interiors	$1.80	72.5	Each	$130.50
9930	0012	Varnish 1 coat + sealer on 7 window interiors	$89.00	7	Each	$623.00
09 91 13.70	0510	Prime and paint 2 coats exterior latex on 7 window exteriors, including trim	$89.00	7	Each	$623.00
08 81 55.10	0500	Repair broken window panes	$7.90	7.8	SF	$61.62
08 05 05.20	5020	Rehang room 3 - bedroom window sash	$44.00	1	Each	$44.00
08 81 55.10	0500	Install glazing in room 3 and 4 door transoms	$7.90	4.2	SF	$33.18
		Window rehabilitation	$400.00	11	Each	$4,400.00
					Total Windows	**$7,264.80**

Division	Reference Number	Doors	Total O&P	Total Units	Unit	Total Cost
09 91 03.30	0040	Scrape and sand interior and exterior of 4 exterior doors	$0.87	120	SF	$104.40
9930	0012	Varnish 1 coat + sealer on interior of 4 exterior doors	$186.00	4	Each	$744.00
09 91 13.70	0370	Prime and paint 2 coats exterior latex on exterior of 4 exterior doors, including frame and trim	$186.00	4	Each	$744.00
08 81 55.10	0500	Replace window panes in 3 doors	$7.90	13	SF	$102.70
08 14 13.10	3100	Install new room 4 - bathroom interior door according to plans, pine 3'-0" x 7'-0"	$615.00	1	Each	$615.00
08 05 05.10	1500	Rehang room 4 - kitchen pantry door	$64.00	1	Each	$64.00
		Scrape and sand interior and exterior of 2 interior doors	$40.00	2	Each	$80.00
		Varnish 1 coat + sealer on both sides of 2 interior doors	$40.00	2	Each	$80.00
08 11 63.23	1540	New aluminum storm doors, painted white	$410.00	4	Each	$1,640.00
					Total doors	**$4,174.10**

Division	Reference Number	Hardware	Total O&P	Total Units	Unit	Total Cost
08 71 20.40	1700	Residential interior door lock set for 4 rehung doors	$56.00	4	Each	$224.00
08 71 20.41	1000	Dead locks, tubular, standard duty, outside key	$127.00	4	Each	$508.00
06 05 23.10	1800	Finish nails	$1.50	30	Lb	$45.00
06 05 23.10	0600	Common nails, plain assorted lengths	$1.43	30	Lb	$42.90
06 05 23.50	0600	Wood screws, steel assorted lengths	$6.45	20	Lb	$129.00
					Total Hardware	**$948.90**

Division	Reference Number	Wood - Exterior	Total O&P	Total Units	Unit	Total Cost
07 46 23.10	3200	Install new clapboard siding to replace deteriorated existing, cedar bevel, A grade, 6"	$6.60	180	SF	$1,188.00
06 25 26.10	0510	Replace 50% of the tongue and groove porch roof, 5/8" standard	$10.75	94	SF	$1,010.50
09 91 03.30	1300	Scrape and sand wood porch columns	$4.46	49	SF	$218.54
09 91 13.42	0140	Paint wood porch post, primer and 2 coats exterior latex	$4.47	49	LF	$219.03
09 91 13.42	0470	Finish porch flooring, 2 coats sealer	$0.42	162	SF	$68.04
06 22 13.40	3350	Replace fascia 1x6 board on bay window	$3.27	10.5	LF	$34.34
06 22 13.60	0230	Replace soffit 1x10 on bay window	$3.97	10.5	LF	$41.69
06 22 13.40	3350	Replace fascia 1x6 sterling pine on west elevation	$3.27	24	LF	$78.48
09 91 13.80	0410	Painting soffit and fascia board, primer and 2 coats exterior latex	$1.61	146	LF	$235.06
06 43 13.20	0110	2 sets of new box exterior stairs, 3 risers each, oak	$130.00	6	Riser	$780.00
06 43 13.40	0490	Railings, oak	$17.10	6	LF	$102.60
09 91 03.30	0720	Scrape and sand all exterior wood clapboards	$0.93	1704	SF	$1,584.72
06 11 10.28	0320	New porch decking joists, treated lumber	$1.59	80	LF	$127.20
					Total Exterior Wood	**$5,688.19**

Division	Reference Number	Wood - Interior	Total O&P	Total Units	Unit	Total Cost
06 43 13.20	1710	New wood basement stair unit, 10 risers, pine	$86.50	10	Riser	$865.00
06 43 13.40	0490	Railings, oak	$17.10	18	LF	$307.80
06 05 05.20	3080	Reinstall interior base boards	$2.64	95	LF	$250.80
31 31 16.13	0020	Termite control	$0.83	143	SF	$118.69
31 31 16.13	0400	Insecticide for termite control	$105.00	5	Gal	$525.00
					Total Interior Wood	**$2,067.29**

Division	Reference Number	Electrical	Total O&P	Total Units	Unit	Total Cost
2605 90.10	1220	Residential wiring, 200 amp service, 20' runs and 14/2 wiring	$2,225.00	1	Each	$2,225.00
26 51 13.50	5400	Interior ceiling mounted incandescent light fixtures. 10" opal glass drum	$127.00	4	Each	$508.00
26 05 90.10	6310	Kitchen florescent economy light	$90.50	1	Each	$90.50
26 05 90.10	6710	Closet and basement incandescent light fixture - porcelain lamp holder with switch	$20.50	3	Each	$61.50
26 05 90.10	6350	Wall mounted economy fixture for porch and rear patio	$56.00	2	Each	$112.00
26 05 90.10	8320	Low noise bathroom vent fan	$134.00	1	Each	$134.00
26 05 90.10	8320	Low noise kitchen vent fan	$134.00	1	Each	$134.00
D5010 220	2820	Residential service/distribution, single phase, 200 amp service	$3,752.00	1	Each	$3,752.00
26 05 90.10	9530	Thermostat with low voltage wire, heating and cooling	$43.50	1	Each	$43.50
					Total Electrical	**$7,060.50**

Division	Reference Number	Equipment	Total O&P	Total Units	Unit	Total Cost
E1090 310	1300	Complete kitchen system components	$6,367.00	1	Each	$6,367.00
		Prefinished wood cabinets				
		Plastic laminated countertop				
		Steel sink & faucet				
		Stove & vented range hood				
D2010 960	2000	Bathroom plumbing and fixtures on 2 walls	$7,200.00	1	Each	$7,200.00
22 34 30.13	2040	30 Gal. gas domestic water heater	$1,300.00	1	Each	$1,300.00
D3020 124	2300	Complete heat generating heating and cooling system to 1200 SF	$7.78	1200	SF	$9,336.00
					Total Equipment	**$24,203.00**

Division	Reference Number	Site Work	Total O&P	Total Units	Unit	Total Cost
03 31 05.35	0300	Concrete, normal weight, 4000 psi, delivered	$113.00	4	CY	$452.00
03 31 05.70	0050	Placing concrete sidewalk, labor and equipment	$80.00	2	CY	$160.00
03 11 13.65	3000	Forming concrete slab up to 6" thick	$4.50	84	LF	$378.00
32 31 29.20	0012	Install new cedar picket fence along west property line	$14.75	61	LF	$899.75
32 91 19.13	400	Topsoil placement and grading	$5.75	6.6	CY	$37.95
					Total Site	**$1,927.70**

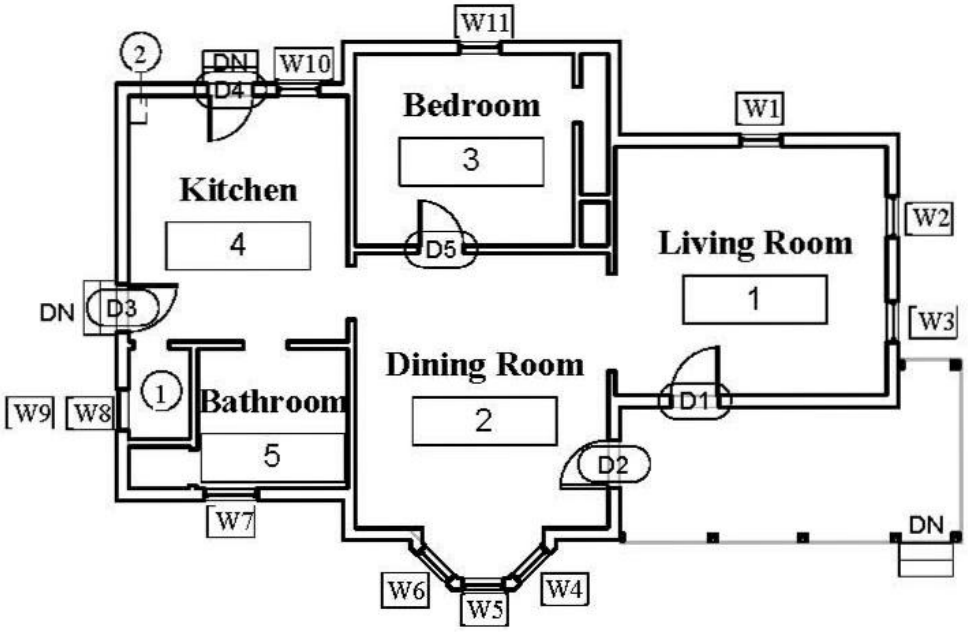
Division	Reference Number	Finishes	Total O&P	Total Units	Unit	Total Cost
09 23 20.10	0300	Gypsum plaster, 2 coats, no lath, on all room 4 - kitchen walls	$27.00	57	SY	$1,539.00
09 23 20.10	0300	Gypsum plaster, 2 coats, no lath, to repair room 4 - kitchen ceiling	$27.00	19	SY	$513.00
09 64 29.10	7800	Sand and finish all interior floors with 2 coats polyurethane	$2.29	840	SF	$1,923.60
09 91 03.30	0040	Scrape and sand all interior wood trim	$0.90	277	SF	$249.30
09 93 23.10	0012	Varnish interior wood trim in rooms 1 and 2	$1.19	120	SF	$142.80
09 91 23.52	7500	Prime and paint interior wood trim in rooms 3, 4, and 5 with 1 coat interior latex paint	$1.59	165	LF	$262.35
09 91 23.72	3210	Prime and paint 2 coats on all interior walls	$1.35	1482	SF	$2,000.70
09 91 23.72	3210	Prime and paint 2 coats on all interior ceilings	$1.35	945	SF	$1,275.75
09 91 13.62	0570	Prime and paint 2 coats exterior latex on all exterior walls	$0.69	1704	SF	$1,175.76
09 91 13.42	0600	Sand and apply sealer and exterior latex to porch decking, 2 coats	$3.22	159	SF	$511.98
					Total Finishes	**$9,594.24**

Category Costs	
Demolition	$23,995.03
Roof	$2,509.86
Masonry	$421.64
Windows	$7,264.80
Doors	$4,174.10
Hardware	$948.90
Wood Exterior	$5,688.19
Wood Interior	$2,067.29
Electrical	$7,060.50
Equipment	$24,203.00
Site Work	$1,927.70
Finishes	$9,594.24
	$89,855.25
Location Costs Index (.90)	**$80,869.73**
General Requirements	$6,000.00
Appraisal	$500.00
Architects Fees	$4,000.00
Engineering Fees	$500.00
Permits and Fees	$1,000.00
Developer Fees	$5,600.00
Construction Insurance	$12,000.00
Construction Loan Interest	$4,900.00
Contingency Fee	$8,000.00
	$42,500.00
Total Project Costs	**$123,369.73**

CHAPTER 5

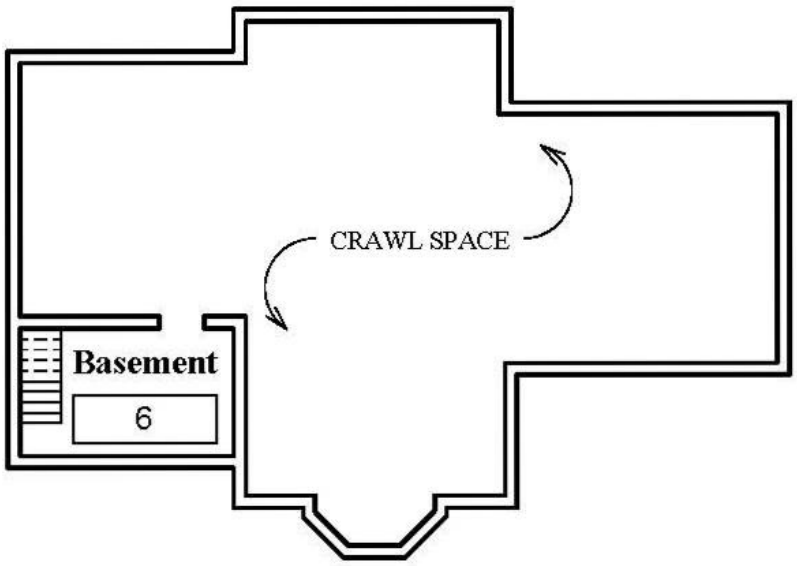
Proposed Design for the Spurgeon House

The following architectural drawings document the existing structure and present one proposed design option. This is not the only design option for rehabilitation, but one that requires the least amount of alteration to the original structure. Following the architectural drawings are the finish schedules; tables detailing the specific finishes selected for the home. The suggested paint colors and wood stains were selected based on historical research and visual observation. Paint colors were selected from the National Trust for Historic Preservation collection of Valspar paints available at Lowe's Home Improvement. Wood stains are all Minwax Wood Finish products available at Lowe's Home Improvement. Wood stains can be substituted with a similar product if necessary.



Existing First Floor Plan

Scale: 3/32" = 1'-0"

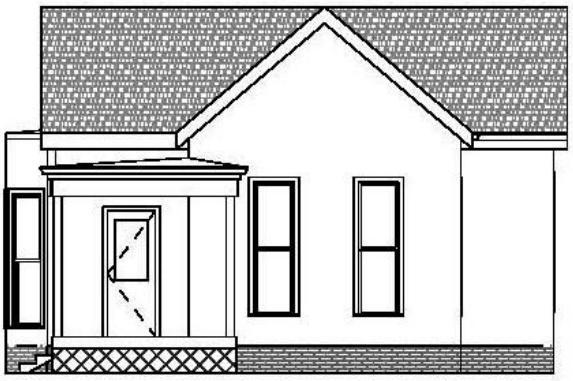


Existing Basement Floor Plan

Scale: 3/32" = 1'-0"

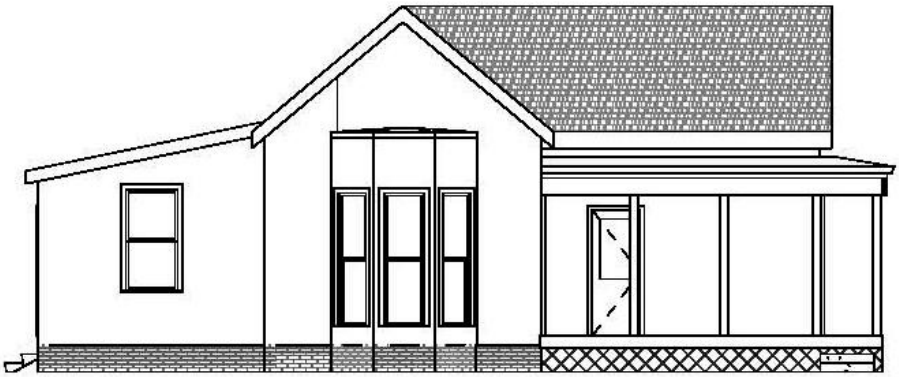
Keyed Notes

1. Floor hatch to basement.
2. Chimney chase.



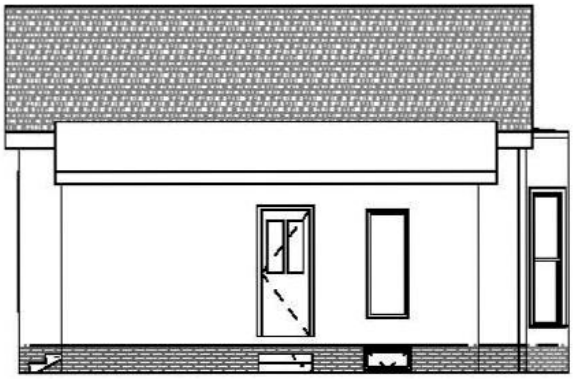
East Elevation

Scale: 3/32" = 1'-0"



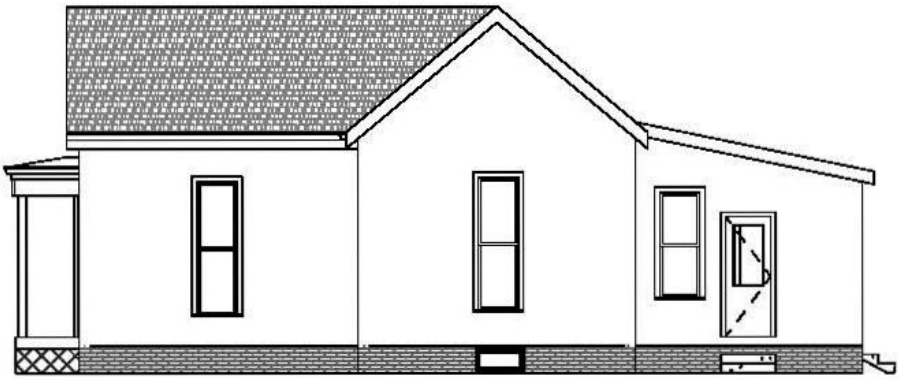
South Elevation

Scale: 3/32" = 1'-0"



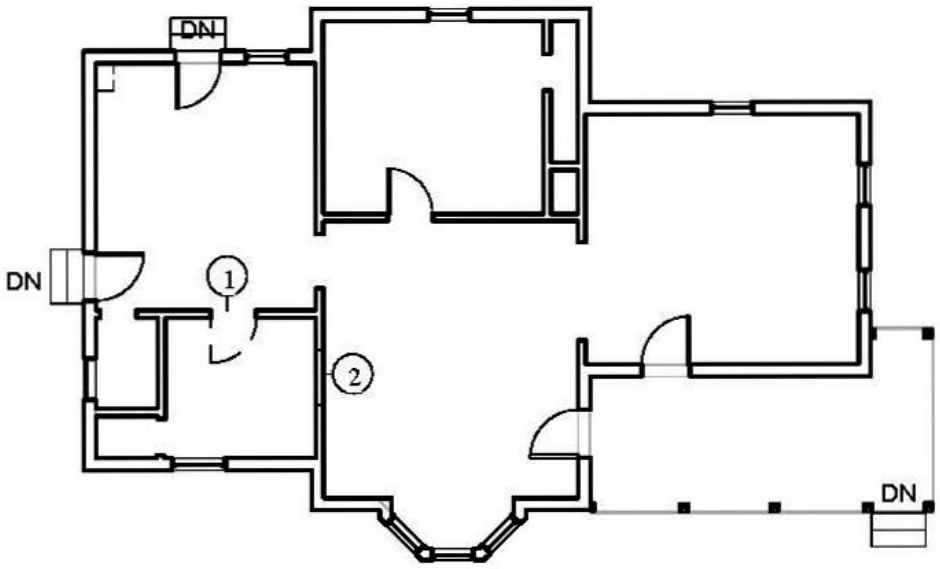
West Elevation

Scale: 3/32" = 1'-0"



North Elevation

Scale: 3/32" = 1'-0"



First Floor Demolition Plan

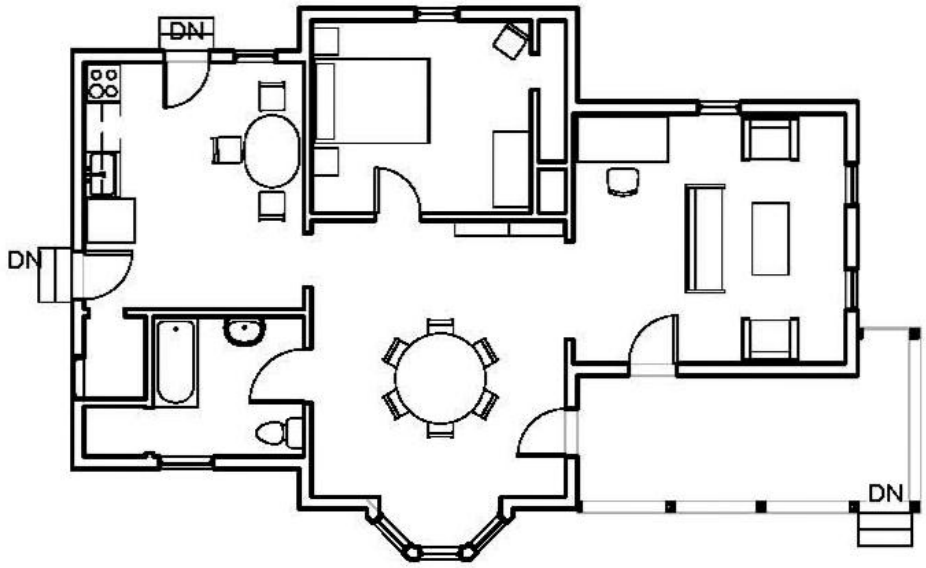
Scale: 3/32" = 1'-0"

General Demolition Notes

1. Contractor to lawfully dispose of all construction materials per local governing agencies regulation
2. The sale of items removed from the building site is strictly prohibited without the owner's consent
3. Contractor shall protect all adjacent areas, finishes, etc. from damage, contractor is responsible for damage repairs

Keyed Notes

1. Remove existing door, frame, and trim. Close in opening with new plaster and wood or metal lath.
2. Demo new door opening. Salvage and reuse existing baseboard trim to be installed elsewhere in the building.



Proposed First Floor Plan

Scale: 3/32" = 1'-0"

General Notes

1. All construction shall be done in accordance w/ the City of Muncie standard specifications, and applicable utility company's specifications. All materials and workmanship shall conform to the City of Muncie regulations and the Secretary of Interior's Standards.
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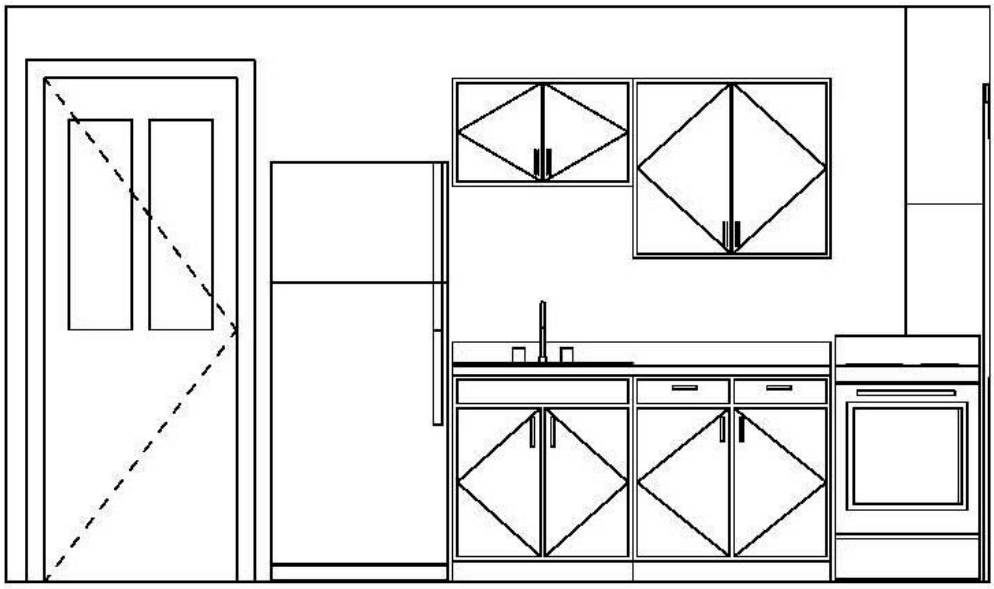
4. Rough grading shall be accomplished prior to utility construction.
6. Unless otherwise directed, the contractor shall be responsible for removing and replacing or protecting any existing signs, structures, fences, etc. Encountered on the job and restoring them to their original condition.



Proposed Room 4 West Elevation

Scale: 3/8" = 1'-0"

General Notes

1. The above elevation represents a possible layout for cabinets, appliance, and plumbing. The Church can choose to reinstall the cabinets and other appliances that were placed in storage.
2. The chimney chase may be used to vent a range.

Finish Schedules

Exterior Finish Schedule	
Element	**Finish**
Wood Siding	6003-1A
Trim	6003-1C
Columns	6003-1C*
Fascia	6003-1C
Eaves	6003-1C
Porch Floor	6003-1C*
Porch Ceiling	6003-1A
Stairs	6003-1C*
Roof Shingles	Estate Gray

Interior Finish Schedule				
Room #	**Walls**	**Trim**	**Floor**	**Ceiling**
1	7006-1	Red Oak 215	Ipswich Pine 221	7004-11
2	7006-1	Red Oak 215	Ipswich Pine 221	7004-11
3	3007-10C	7004-11	Ipswich Pine 221	7004-11
4	5006-3B	7004-11	Ipswich Pine 221	7004-11
5	7006-1	7004-11	Ipswich Pine 221	7004-11

Door Schedule		
Door #	**Room # Side**	**Finish**
D1	Exterior	5004-4B
	1	Red Oak 215
D2	Exterior	5004-4B
	2	Red Oak 215
D3	Exterior	5004-4B
	4	Red Oak 215
D4	Exterior	5004-4B
	4	Red Oak 215
D5	2	Red Oak 215
	3	7004-11
D6	2	Red Oak 215
	5	7004-11
D7	4	7004-11
	6	7004-11

Window Schedule			
Window #	**Window Side**	**Sash Finish**	**Trim Finish**
W1	Exterior	5004-4B	6003-1C
	Interior	Red Oak 215	Red Oak 215
W2	Exterior	5004-4B	6003-1C
	Interior	Red Oak 215	Red Oak 215
W3	Exterior	5004-4B	6003-1C
	Interior	Red Oak 215	Red Oak 215
W4	Exterior	N/A	6003-1C
	Interior	N/A	Red Oak 215
W5	Exterior	N/A	6003-1C
	Interior	N/A	Red Oak 215
W6	Exterior	N/A	6003-1C
	Interior	N/A	Red Oak 215
W7	Exterior	N/A	6003-1C
	Interior	N/A	7004-11
W8	Exterior	5004-4B	6003-1C
	Interior	Red Oak 215	7004-11
W9	Exterior	5004-4B	6003-1C
	Interior	5004-4B	7004-11
W10	Exterior	5004-4B	6003-1C
	Interior	Red Oak 215	7004-11
W11	Exterior	5004-4B	6003-1C
	Interior	Red Oak 215	7004-11

Finish Index		
Finish #	**Color**	**Finish Type**
7006-1	Homestead Resort Jefferson White	Valspar Interior Signature Paint
3007-10	Cincinnatian Hotel Hannaford	Valspar Interior Signature Paint
5004-4B	Jekyll Sans Souci Green	Valspar Duramex Exterior Paint
5006-3B	Lyndhurst Shady Grove	Valspar Interior Signature Paint
6003-1A	Woodlawn Snow	Valspar Duramex Exterior Paint
6003-1C	Filoli Carriage House	Valspar Duramex Exterior Paint
6003-1C*	Filoli Carriage House	Valspa Latex Porch and Floor Enamel Paint
7004-11	Woodlawn Dewkist	Valspar Interior Signature Paint
Ipswich Pine 221	Ipswich Pine 221	Minwax Wood Finish
Red Oak 215	Red Oak 215	Minwax Wood Finish
Estate Gray	Estate Gray	Owens Corning 25-Year Supreme Estate Gray AR 3-Tab Shingles

CHAPTER 6

Conclusion

Though it is a small, modest home within the city of Muncie, Indiana, the Spurgeon House remains significant to the historic fabric of the community. Like a history book, this home remains a part of the Old West End chapter and its contribution to the evolution of Muncie and should not be forgotten. Constructed by an active and philanthropic doctor, for whom the home is named, the Spurgeon House is a remnant of a time when the gas boom fueled industrialization. When the Old West End Historic District was listed on the National Register of Historic Places in 1985, the Spurgeon House received a "contributing" remark on the nomination. There was a time when this one-bedroom Victorian cottage was worthy of recognition and even received local landmark status in 1996, but recent events have led to its downfall.

Threatened with demolition, the owners of the Spurgeon House, the St. Peter's Rock Foundation in Christ Church, wish to rehabilitate this home for families in need. Familiar with Muncie's history and the importance of historic preservation within a community, they want to respectfully restore the home's curb appeal and charm. The rehabilitation of this home may help to spark the preservation of the surrounding buildings and community. There can be no progress without taking the first step.

According to Bernard M. Fielden, the author of *Conservation of Historic Buildings*, a major concern in regards to town planning economics are the demands of conflicting interests. He refers to 'planning blight' as "an economic disease caused by lack of decision or by attempting too ambitious schemes… minimum interventions at key points are best for the community."[13] These conflicting values and interests must be evaluated and analyzed before rash decisions are made. From this the "least bad" choice must be selected. For the Spurgeon House, which is the least bad; demolition or rehabilitation? Fielden states that "the best way of preserving buildings… is to keep them in use."[14] Buildings left vacant and vulnerable to deterioration will ultimately face the wrecking ball unless people can see the value behind the historic façades.

[13] Bernard M. Fielden, *Conservation of Historic Buildings* (Oxford: Architectural Press, 2003), 12.
[14] *Ibid.*, 10.

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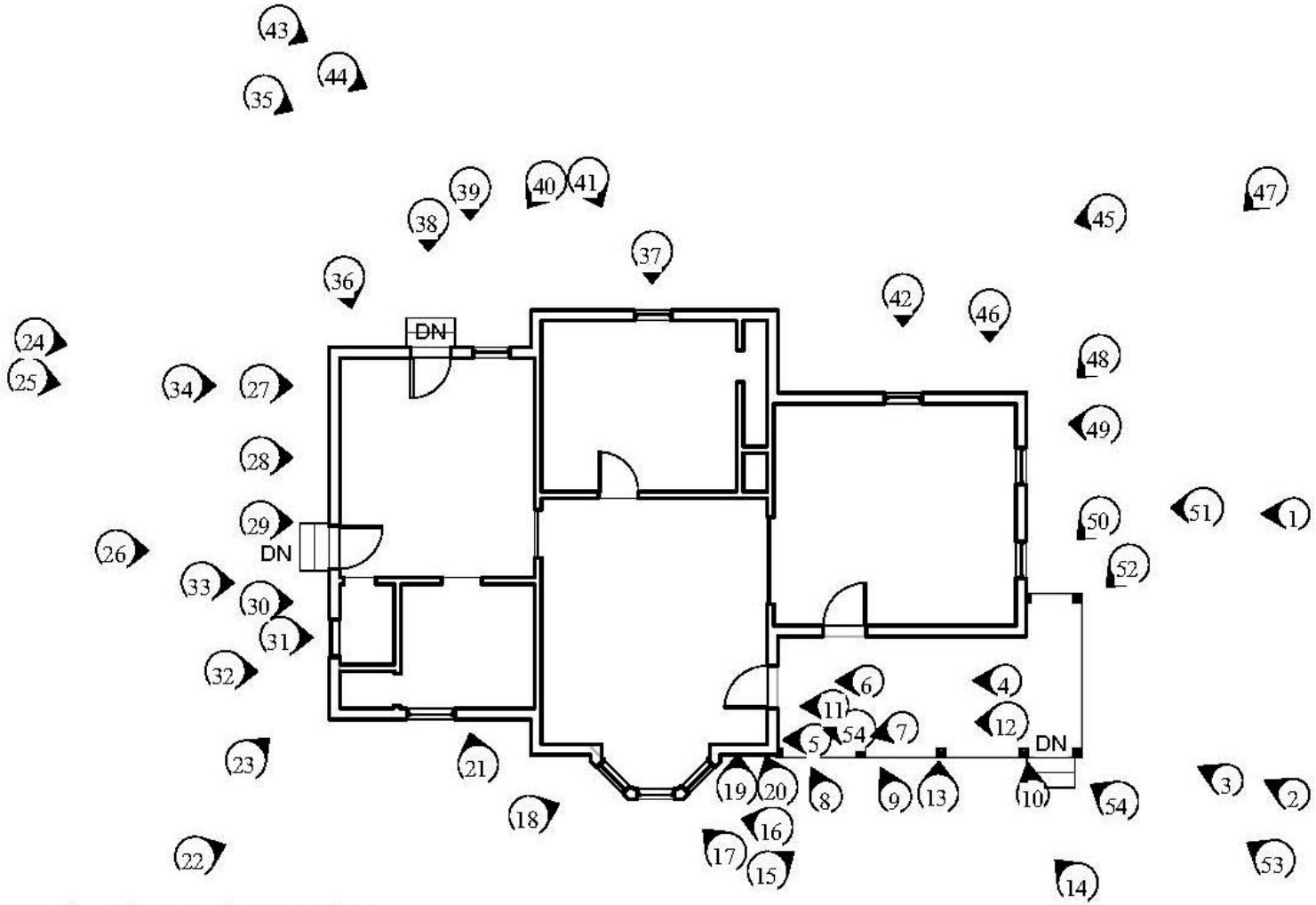
APPENDIX 1

Photographs

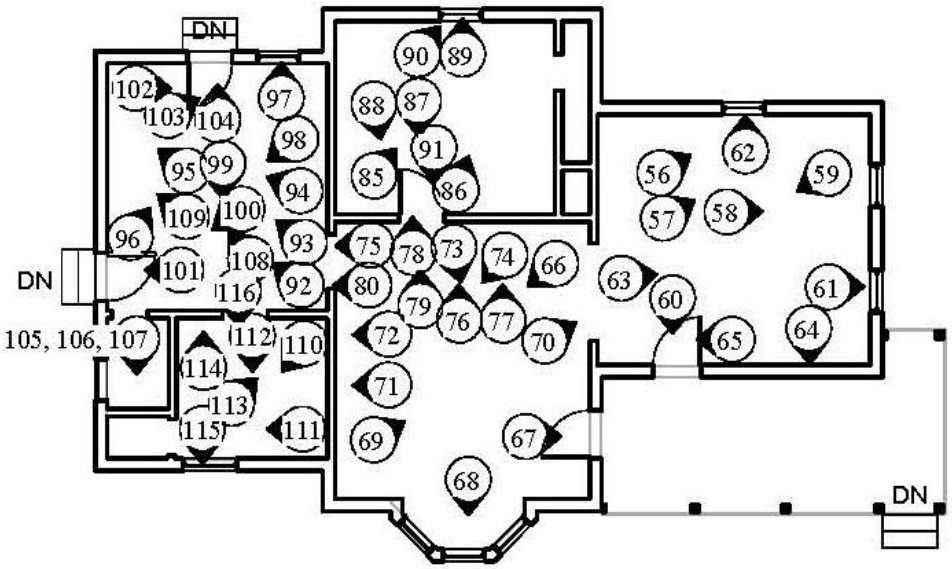
The following architectural plans have the location of all photographs with coordinating photo reference numbers and note the direction in which the photo was taken. The table below indicates the date the photographs were taken. All photographs were taken by Emily Husted.

Date	Photograph Reference Numbers
October 18, 2010	024, 054, 073, 116
November 12, 2010	023, 043-044
November 18, 2010	001-005, 016-018, 022, 026, 034-036, 039-040, 045, 047-048, 051
September 17, 2011	008-010, 021, 025, 038, 041-042, 049-050, 053
October 30, 2011	006-007, 011, 019-020, 027-033, 055
January 30, 2012	046, 052, 056-070, 079-080, 085-087, 089-090, 093, 097-101, 105-106, 108-110, 112-114
February 6, 2012	012-015, 037, 071-072, 074-078, 081-084, 088, 091-092, 094-096, 102-104, 107, 111, 115, 117-125, 127-135
February 27, 2012	126, 136-152
March 20, 2012	153-159



Exterior Photo Reference Plan

Scale: 3/32" = 1'-0"



Interior First Floor Photo Reference Plan

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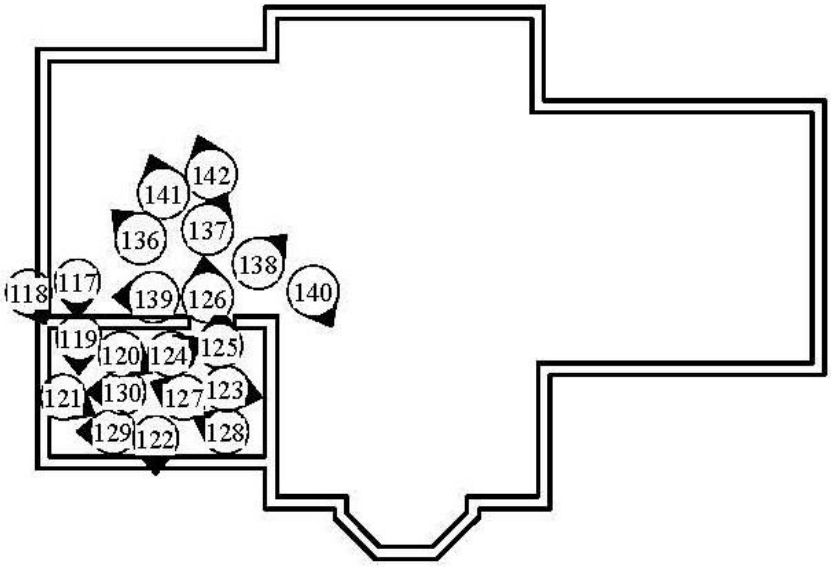
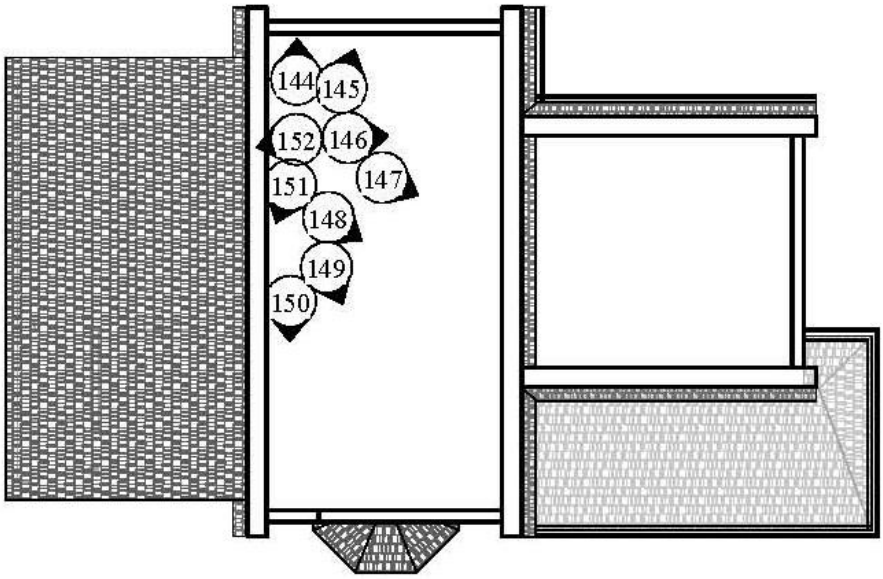


Interior Basement Photo Reference Plan

Scale: 3/32" = 1'-0"



Interior Attic Photo Reference Plan

Scale: 3/32" = 1'-0"

General note

1. Access into the attic space is through a small opening in the ceiling of room 3.

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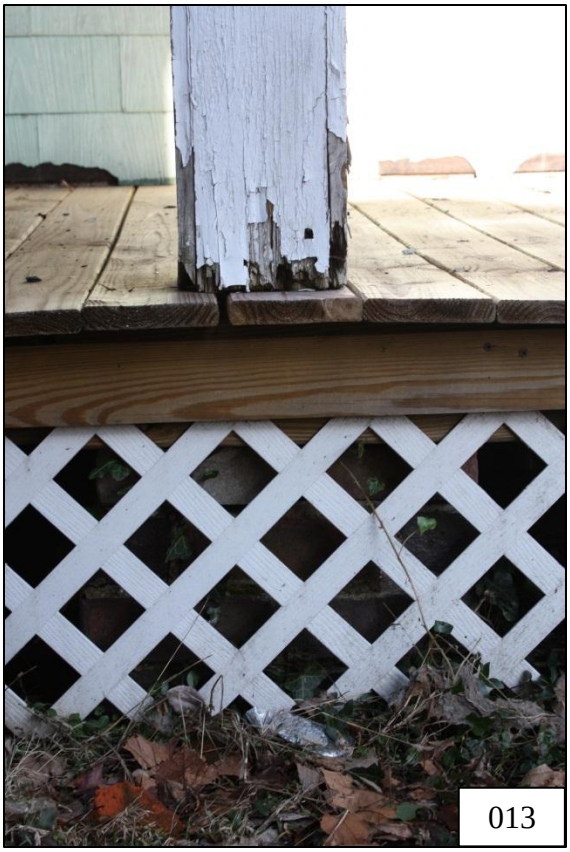

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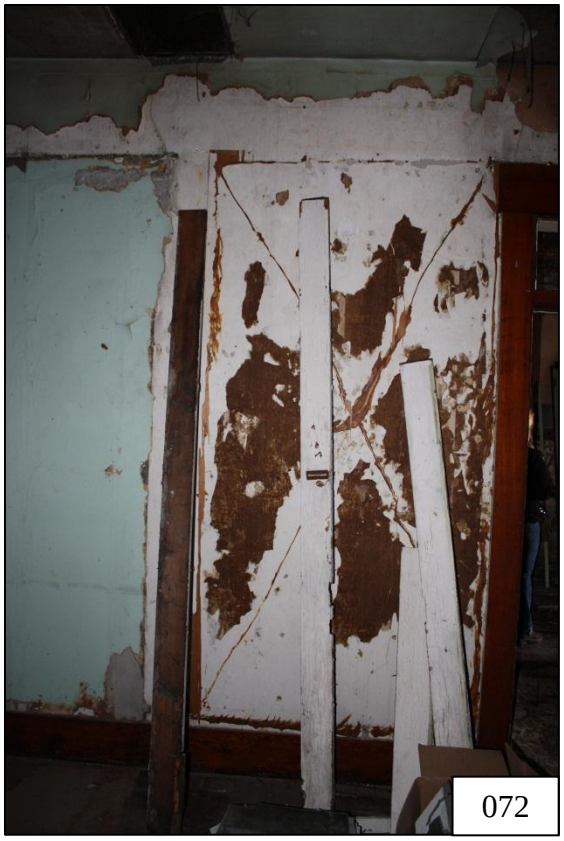

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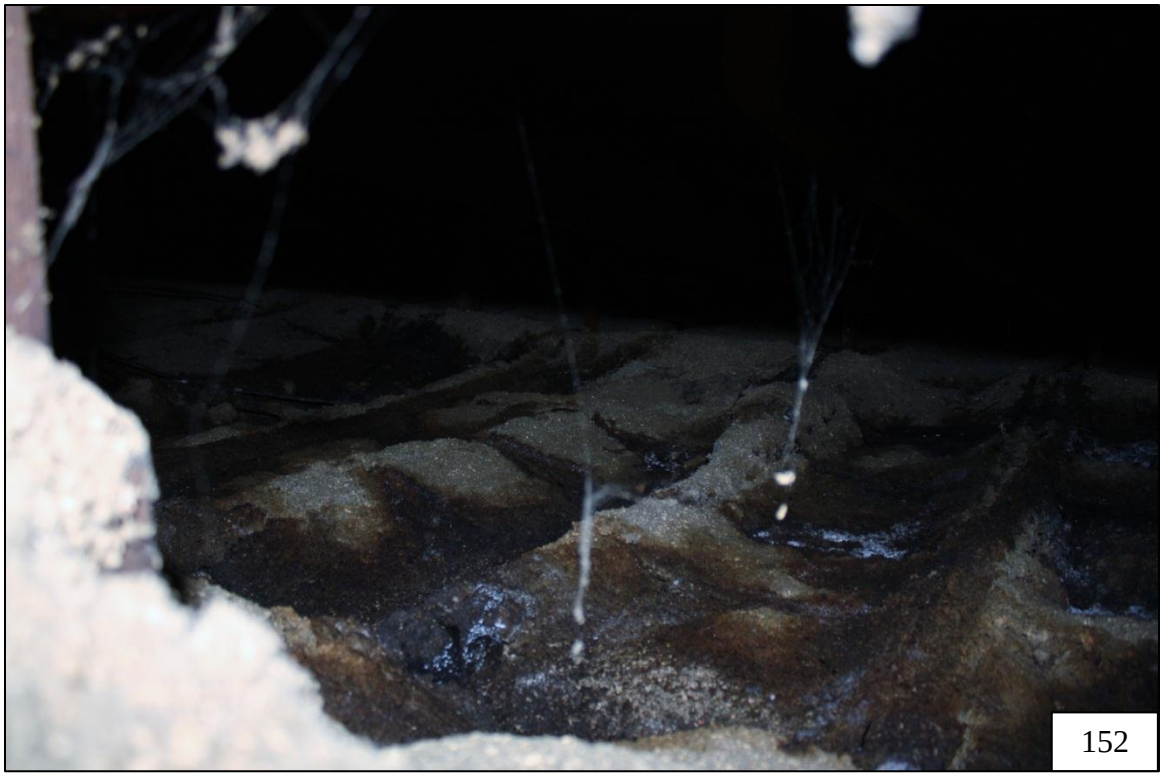

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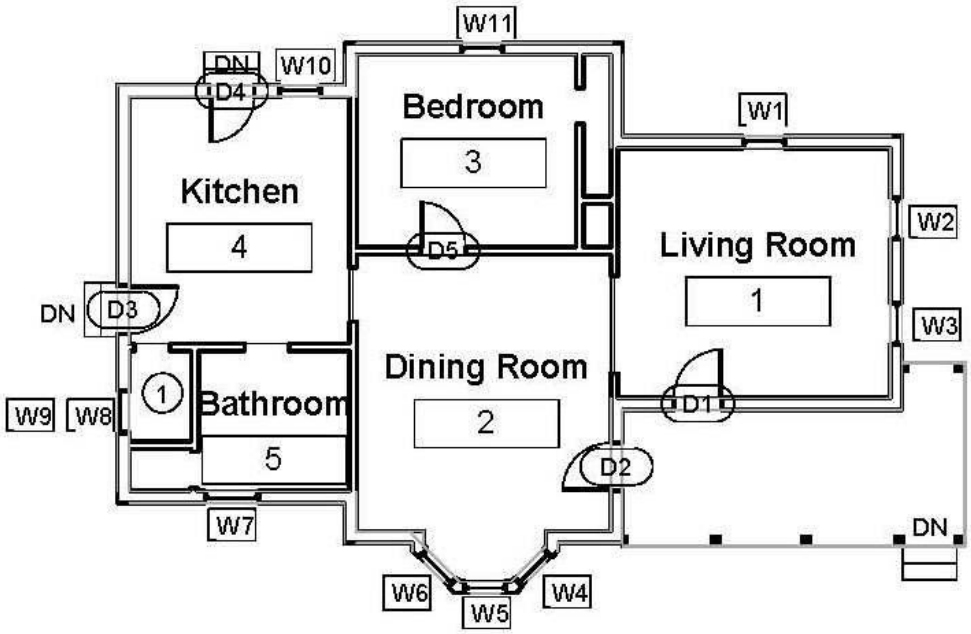
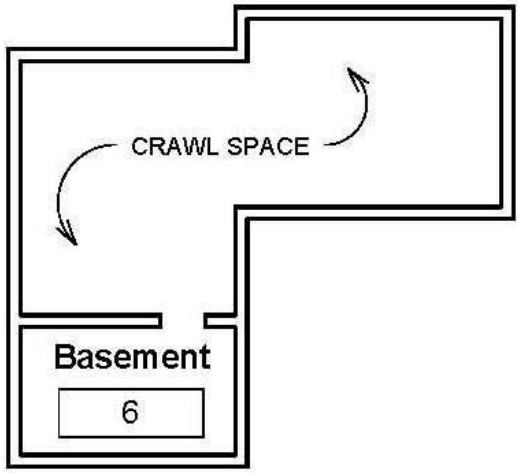
APPENDIX 2

Architectural Drawings

The architectural drawings were created using Autodesk Revit Architecture 2010 by Emily Husted. The drawings are to scale; a scale is provided on each drawing. All dimensions will need to be field verified.



1 Existing First Floor Plan
3/32" = 1'-0"



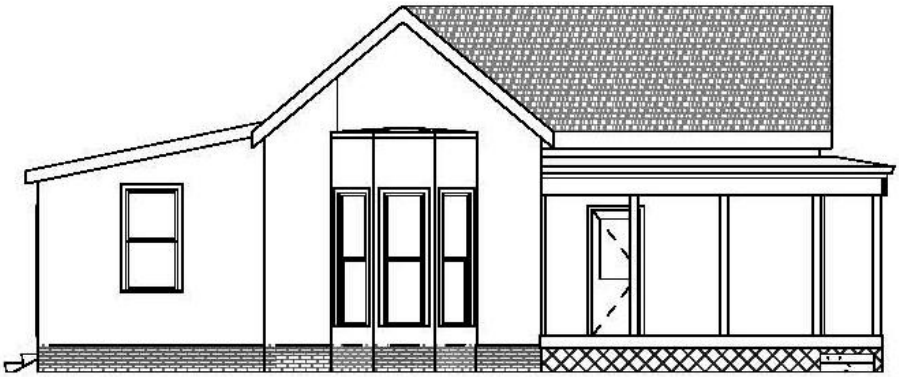
2 Existing Basement Floor Plan
3/32" = 1'-0"

Keyed Notes

1. Floor hatch to basement.

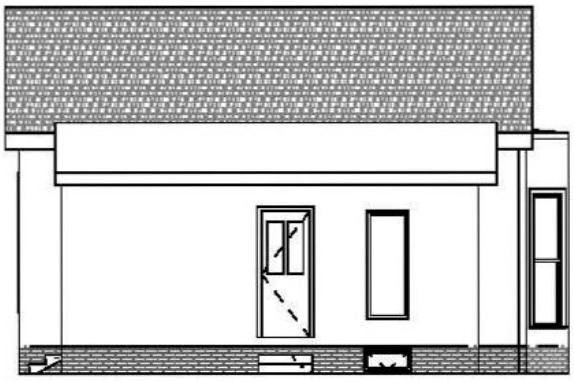
East Elevation

Scale: 3/32" = 1'-0"



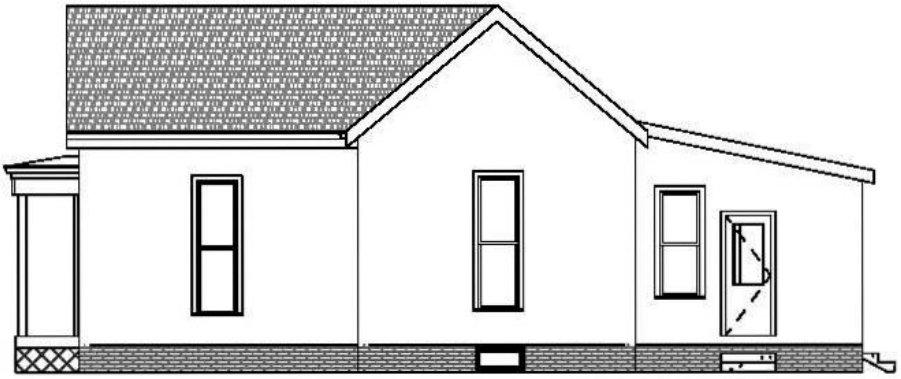
South Elevation

Scale: 3/32" = 1'-0"



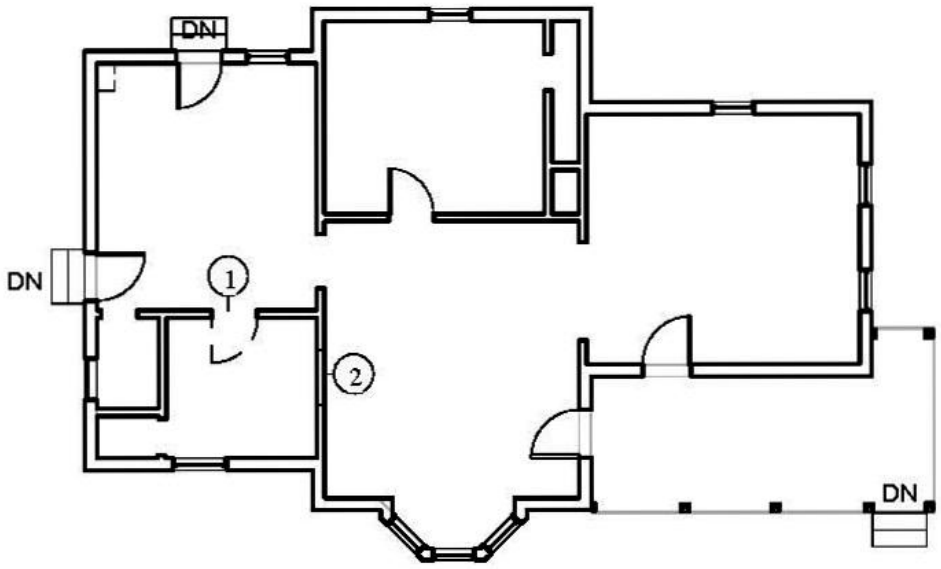
West Elevation

Scale: 3/32" = 1'-0"



North Elevation

Scale: 3/32" = 1'-0"



First Floor Demolition Plan

Scale: 3/32" = 1'-0"

General Demolition Notes

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2. The sale of items removed from the building site is strictly prohibited without the owner's consent
3. Contractor shall protect all adjacent areas, finishes, etc. from damage, contractor is responsible for damage repairs

Keyed Notes

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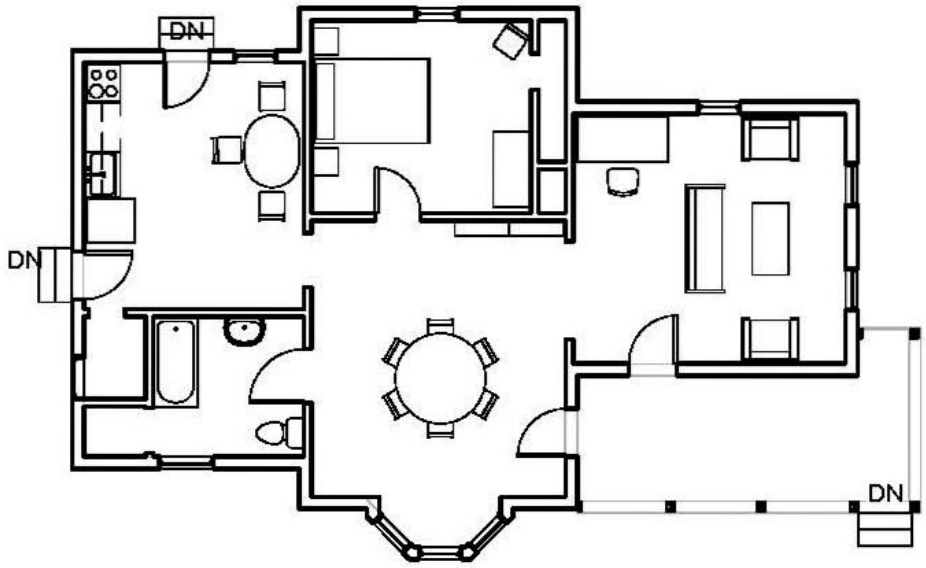
2. Demo new door opening. Salvage and reuse existing baseboard trim to be installed elsewhere in the building.



Proposed First Floor Plan

Scale: 3/32" = 1'-0"

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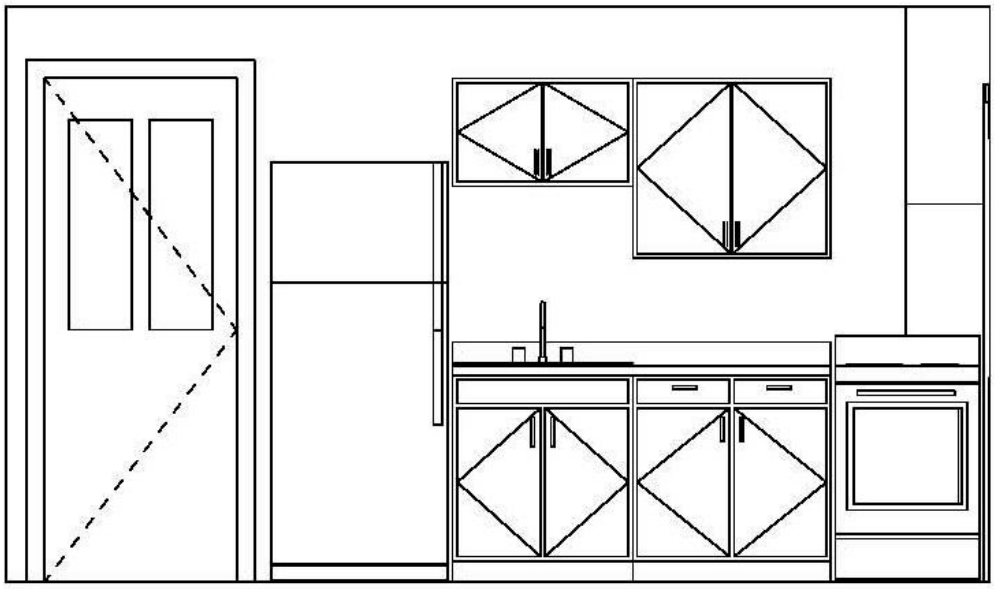

Proposed Room 4 West Elevation

Scale: 3/8" = 1'-0"

General Notes

1. The above elevation represents a possible layout for cabinets, appliance, and plumbing. The Church can choose to reinstall the cabinets and other appliances that were placed in storage.
2. The chimney chase may be used to vent a range.